The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 829.---Vol. XXI.] LONDON, SATURDAY, JULY 12, 1851. [Price 6d.

IMPORTANT TO MINING GENTLEMEN.—TO BE SOLD, BY PRIVATE CONTRACT, a very extensive PLOT of MINING GROUND, 10 miles in length and 4 in width: 21 years' lease, of which nearly 20 years remain unexpired, at a good duty. Several mines of lead ore have been found in the ground, which are very likely to be productive; they are situate in the manor of Bainbridge, in Wensleydale, Yorkshire.—Application may be made to John Grime, Esq., of Leyburn, near Bedale; or personally to Mr. Edmund Peacock, Redmire, who will show the ground, and give all information about it.

CARMARTHENSHIRE.

TO BE IMMEDIATELY SOLD, OR LET, BY PRIVATE CONTRACT, on a long lease of years, upon moderate and advantageous terms, SEVERAL VEINS OF ANTHRACITE COAL AND IRON ORE, called the "Black-band," together with THREE FARMS, in the parish of BETTWS, containing about 112 acres of land.

There are FOUR VEINS OF COAL—one is 6 feet thick, and the three others above 3 feet each, which will yield such a quantity of coals as to produce, by a royalty of 6d. per ton only, upwards of £60,500. The Black-band is about 14 inches thick, and will yield, by the like royalty, upwards of £18,150.

There are, besides, several STRATA of RED IRON ORES on these premises, which, together with the value of the surface, are to be taken into consideration.

These premises are on the banks of the Aman, on the alinement of the Llanelly Railroad, and within about a quarter of a mile of it, on an inclined plane; and it is believed that the South Wales Railroad will form a junction with the Llanelly Railroad in the course of this year, whereby there will be a communication with all the kingdom.

There is also a QUARRY of very fine FLAGSTONES upon these lands.

For further particulars apply to Thomas Parry, Esq., or to Mr. John Williams, solicitors, Carmarthen.—Carmarthen, June 10, 1851.

TYMAWR COLLIERY, NEWBRIDGE, Glamorganshire. —TO BE LET, upon a minimum rent of £150 per annum, or 6d. per ton gale-age, and immediate possession given, TYMAWR COLLIERY, on the Rhonda Branch of the Taff Vale Railway, having a siding, with tips and screens, within 150 yards of the pit's mouth. There are two veins of coal already opened to—viz., the Gelly Whion and Cymmer Veins, and the pit sunk 76 yards below these, to within a short distance of the Dinas Vein, celebrated for its very superior gas and coking qualities, and which may now be reached by a very moderate further outlay.

The PLANT, which is of the most substantial description, and nearly new, to be taken at a valuation, consists of a first-rate horizontal 18-inch cylinder engine, 45-feet cylindrical boiler, 8-inch force pump, and 6-inch lift pump, with T-bobs and gearing, flat winding chains, pit framing, 70 tram waggons, 30 rolleys, tramplates, 40 sets of colliers' tools, smiths' and carpenters' tools, &c.

To view the property apply to Mr. Aaron Crosfield, Tymawr-house; and for further particulars apply to Mr. R. M. Toogood, auctioneer and appraiser, Newport, Monmouthshire; E. M. Miller, Esq., official assignee, 19, St. Augustine's-place, Bristol; Messrs. James, solicitors, Merthyr Tydvil; or Mr. Wm. Bevan, solicitor, Bristol.

WALL'S-END COLLIERY.—TO BE LET, and entered upon on or after the 28th day of September next, for such a term of years as may be agreed upon, all that CURRENT-GOING COLLIERY, well-known by the name of WALL'S-END COLLIERY, at present held by Messrs. Archbold and partners, under lease from the Dean and Chapter of Durham, comprising the COAL MINES under the whole of the lands belonging to the said Dean and Chapter, in the township of WALL'S-END, in the county of NORTHUMBERLAND.

The Low Main Seam, which has been sunk to at a depth of 22 fathoms below the Bensham Seam, and the Beaumont Seam, which has been bored to at a further depth of 23 fathoms, remain untouched throughout the Royalty. The Low Main Seam, in the royalty next adjoining, is of good quality, and is worked for gas purposes.

The Bensham Seam supplies the vend of the existing colliery. The colliery is contiguous to, and has shipping berths on, the River Tyne.

Plans of the workings of the colliery, and further particulars, may be known on application to Mr. E. F. Boyd, Urpeth Colliery, near Chester-le-street; or at the offices of the Registrar of the Dean and Chapter of Durham, 28, South Bailey, Durham.

Durham, July 2, 1851.

TO CAPITALISTS, COALOWNERS, AND OTHERS.— TO BE LET, with early possession, A COLLIERY, situate in the South Yorkshire Coal District, on the line of the Midland Railway, and within a short distance of the Manchester, Sheffield, and Lincolnshire Railway, by which ready access is obtained to excellent markets, at a small cost. The seam now being got averages from 3 ft. 6 in. to 3 ft. 9 in. in thickness, of which about 100 acres are yet to get. There are also two other seams, each about 5 feet thick, beneath the one now being worked.

There are the requisite cottages, offices, workshops, &c., on the premises, and the colliery is fitted with all the necessary plant for carrying on extensive trade, which can be taken at a valuation. Sufficient reasons can be given for the present occupier declining the business.

For any further particulars, and to view the colliery, apply (by letter) to "A. Z.," Box 58, Post-office, Sheffield.

COLLIERY ENGINES AND FITTINGS.—An extensive PUBLIC SALE will, in the COURSE of a FEW WEEKS, be HELD at LUMPHINNAN'S COLLIERY, LOCHGELLY, of ENGINES and COLLIERY FITTINGS and UTENSILS, so far as not previously sold by private bargain, comprising a high-pressure PUMPING ENGINE, of 40-horse power, 4 pumping and winding gigs, of 14 to 18-horse power, pumps, steelyards, four and two-wheeled carts, tramplates, smiths' tools, and other articles required at a going colliery. These may be inspected on application to the manager, at the colliery.

Apply to Robert Henderson, Esq., of Glencraig, Lochgelly; or Mr. William Fraser, town clerk, Inverkeithing.

STEAM TO INDIA AND CHINA, via EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY

BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—Malta—On the 20th and 29th of every month. Constantinople—On the 29th of the month. Alexandria—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

STIRLING'S PATENT YELLOW METALS—Adapted for SHEATHING, BOLT STAVES, BOLT NAILS, DECK NAILS, as reported on by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK SCREWS, PISTONS, CYLINDERS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction. AGENTS.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow.

Applications for licenses and other information to be addressed to the undersigned, ALFRED BARRETT, Bishopsgate Foundry, Skinner-street.

TO THE MINING AND SHIPPING INTERESTS.

WIRE AND HEMP ROPES,—MANUFACTURED under PATENT GRANTED TO JAMES B. WILSON,
HAYDOCK ROPE-WORKS, NEAR WARRINGTON.

Applicable to SHIPPING, INCLINED PLANES, MINES, COLLIERIES, &c.; as also to WIRE CABLES for SUBMARINE, OVERLAND, and UNDERLAND TELEGRAPHS.

Sizes, with comparative weights and strength, as also price per cwt. or fathom, may be obtained on application to the patentee.

All sizes of wire strands, railway signal lines, flat and round copper rope, lightning conductors, window sash lines, &c.—Warrington, July 5, 1851.

BICKFORD'S PATENT SAFETY FUSE.—The Patentees of the ORIGINAL, and only real, SAFETY FUSE, beg to inform Merchants, Mine Agents, Railway Contractors, and all persons concerned in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. The Safety Fuse is now protected by a Second Patent, and manufactured by greatly improved machinery. BICKFORD, SMITH, DAVEY, Camborne, Cornwall.

SEWERAGE OF LONDON.—The ATTENTION of the COMMISSIONERS appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING of BRICK CULVERTS and OTHER CHANNELS for DRAINAGE.

The experiments made by the Royal Artillery on the embrasures of Plymouth Citadel, constructed of Seyssel Asphalte Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphalte over all other cementitious compositions. A printed account of these experiments can be had on application to I. FARRELL, Secretary,

Seyssel Asphalte Company—"Claridge's Patent"—Established 1838.

Note.—The application of the Asphalte of Seyssel is specially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the *areas* of closed *grave yards*, and for the construction of *catacombs*.

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, renews his OFFERS of SERVICE to CAPITALISTS seeking the means of SECURE INVESTMENTS, which can be made to yield an annual income of 15 to 20 per cent.,

Mr. Crofts has specially for Sale—

Trethevy (2 shares)	Boringdon Park (3 shares)
Wheal Trescoll	New East Crowndale (20 shares)
Holmbush (8 shares)	Allt-y-Crib (10 shares)
Duke of Cornwall (6 shares)	Bronfloyd (70 shares)
Bodmin Consols	Llwynmalees (10 shares)
Herodsfoot	Warleggan Consols (20 shares)
East Russell (10 shares)	South Tamar
East Boringdon (30 shares)	East Tamar
Wheal Tremar (20 shares)	Bedford United
Wheal Lovel (3 shares)	Victoria
Petes Tavy and Mary Tavy (2 shares)	Devon Consols North

The improving condition of mining property, and the probability of its increase with the favourable state of the money market, induces Mr. Crofts to recommend capitalists to seek out *bonâ fide* mines for investment, of which there are abundance, both dividend and non-dividend. In the former 15 to 20 per cent. interest per annum may be realised.

Mr. Crofts will be happy to give the best advice his experience enables him for the guidance of his friends, and transacts business only for principals.

No. 4, King-street, Cheapside, July 12, 1851.

GENERAL MINING OFFICES.
23, *Threadneedle-street, London.*

MR. JOSEPH JAMES REYNOLDS, late of CAMBORNE, CORNWALL, begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING and GENERAL AGENT at the above office, and trusts, by paying a due regard to the welfare of his clients, that he will at all times merit their confidence. Having been connected with the management of mines in the most productive districts of Cornwall upwards of twenty years, and being in communication with some of the most respectable agents in the mining districts, Mr. Reynolds will be enabled at all times to furnish such information as may be relied on.

J. J. REYNOLDS will carry on business upon COMMISSION ONLY, making no intermediate price between buyers and sellers, and will be ready at all times to introduce the buyer and seller of any shares to each other.—Office hours Ten to Four.

MESSRS. FRANCIS & LIGHTOLLER, MINING AGENTS AND CIVIL ENGINEERS.
OFFICE,—No. 34, EXCHANGE ARCADE, MANCHESTER.

Messrs. Francis and Lightoller, may be CONSULTED by MINING COMPANIES or OTHER PARTIES requiring INSPECTIONS and REPORTS on MINES of every description, or by CAPITALISTS and OTHERS desirous of INVESTING their CAPITAL in MINES or other MINERAL PROPERTIES.

Statistics and other general information connected with Mines and the Mineral Districts given or obtained with the utmost dispatch.

Capt. Absalom Francis having had upwards of 30 years' experience in the practical management of mines, and reported on most of the principal ones in the United Kingdom, applicants may rest assured they will receive full and satisfactory information on matters connected with mining.

Arbitrators, and contractors for the erection of engines and every description of mining machinery.

FRANCIS'S MINING OFFICES, 7, John-Street, Adelphi. —The great importance of the Mining Interest at the present moment renders it necessary that every means should be adopted to place its operations on the plainest and fairest foundation.

The system of representing the Value of Mines, by describing them as Dividend or Non-Dividend Paying, is by no means sufficiently explanatory of their real qualities, for it is clear that mines may come under the first denomination which, nevertheless, differ greatly in value: for instance, some continue to divide large profits for a long time, and some in like manner small profits only, whilst there are others which pay dividends, large or small, as the case may be, but only for a very limited period. The selection of mining ground also requires the greatest care, which, in most instances, can only be applied by or through agents, qualified by long and successful practical experience, combined with local geological knowledge.

Mr. MATTHEW FRANCIS, who has, during the last 20 years, without intermission, been engaged as Manager of Mines abroad, as well as in Cornwall and Wales, many of which are making large profits, takes leave to announce, that he has OPENED these OFFICES, where he may be consulted daily from Eleven till Three.

N.B.—Information supplied, without favour or prejudice, as to the present condition and prospects of all mines without distinction, as far as can be ascertained by the closest attention to the best sources of knowledge.

*** The TRANSFER of MINING PROPERTY (such only as is legitimate) negociated on satisfactory terms.

MR. ALFRED SENIOR MERRY, DEALER in COBALT AND NICKEL ORES, and ASSAYER IN GENERAL.—Address:
LEE-CRESCENT, BIRMINGHAM.

MR. JOHN DAVIES, MINING SHAREBROKER,
No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.

MINING SHARES.—Mr. HENRY VATCHER, EXETER, OFFERS his ADVICE and ASSISTANCE to PARTIES willing to INVEST in the ABOVE SECURITIES. Ten years' residence in Exeter, together with periodical visits to nearly all the Mines in Devon and Cornwall, enables him to become thoroughly acquainted with their respective merits.—Mr. VATCHER has at his command, at all times, practical and experienced agents, so that if any inspection is required, the same can be done without delay.

MINING AND RAILWAY OFFICES, No. 3, CASTLE- TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHAREBROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged.

MR. THOMAS JORDAN, METAL BROKER, No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS of HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOLT and BOILER-PLATE IRON, in all its varieties.

The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the Iron they require, by seeking quotations through the Advertiser.

MINING OFFICES, No. 51, THREADNEEDLE-STREET, LONDON.—T. FULLER & CO. beg respectfully to inform the Public that they are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, and have on hand Devon Great Consols, Bedford United, Wheal Mary Ann, Trelawny, Great Wheal Friendship, West and South Caradon, &c.; also in several YOUNG MINES, which are approaching to a dividend state, and will take pleasure in furnishing all particulars connected therewith, either personally or by letter.

MR. R. TRIPP, MINING AGENT, is instructed to BUY and SELL SHARES in the best DIVIDEND MINES (British and Foreign), and in OTHERS, having present and prospective advantages, including Alfred Consols, Bedford United, Devon Great Consols, Botallack, Wheal Crebor, Carvannhall, Callington, South Caradon, West Caradon, South Tolgus, Spearne Consols, West Providence, Trevisky and Barrier, Wheal Trelawny, Mary Ann, Tremayne, Basset, South Tamar, East Tamar, Hennock Lead, Wh. Arthur, Brimpts, &c.—Foreign: St. John del Rey, United Mexican, Cobre, Copiapo, Linares, &c.

Mining Offices, St. Michael's Chambers, St. Michael's-alley, Cornhill, London, July 11.

MINING OFFICE,—3, GEORGE-YARD, LOMBARD- STREET.—Messrs. TREDINNICK & CO. (formerly of Three Kings-court and 52, Threadneedle-street, London) beg to inform their numerous Friends that they have RESUMED BUSINESS at the ABOVE ADDRESS, of PURCHASING and SELLING SHARES in MINES, RAILWAYS, and other PUBLIC COMPANIES, as well as the NEGOTIATION of every description of MONETARY MATTERS, together with COMMISSION BUSINESS in GENERAL.

MESSRS. TREVARTON and CO., MINING SHARE DEALERS AND BROKERS,—5, *ST. JAMES'S-STREET, PALL-MALL.*

MR. PEET, MINING AGENT, 48, Threadneedle-Street, is now prepared to OFFER his SERVICES in the FORMATION of MINING COMPANIES, on the Cost-book System; and also to CONDUCT the LONDON AGENCY of those already established. His offices are advantageously situated. Satisfactory references can be given.—London, April 5, 1851.

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., MINING SHAREBROKERS, 58, LOMBARD-STREET, LONDON, Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES.

Shares for Disposal.

Devon Great Consols	Wheal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Treviskey
Trelawny	Tolgus	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—No Charge made for the registration of shares unless business be transacted.

GLAMORGANSHIRE CANAL NAVIGATION.— The COMMITTEE of the Company of proprietors of the GLAMORGANSHIRE CANAL NAVIGATION are desirous of ENGAGING an OUT-DOOR SUPERINTENDENT of the WORKS of the said Canal, at a salary not exceeding Three Hundred Pounds per annum, with the use of a House belonging to the Company.

The duties which will be required will consist in looking after the maintenance, repair, and improvement of the Locks, and all other works of the Canal, and the facilitation, in every way, of an increasing traffic; and parties tendering services will be expected to have had considerable experience in Canals, and to be capable of applying to the Glamorganshire Canal the latest improvements in Locks, and all other matters connected with Canal Navigation and the shipping of Coal for export from the Canal.

It will not be required of the Out-door Superintendent to take any part in the accounts of the Canal, or the payment of wages, or the purchase of any description of material for the use of the Canal, but he will be expected to keep a correct account of the time and occupation of the men employed under him, and to devote his services exclusively to the Company, and never to be absent without permission.

No perquisites or privileges beyond the house and salary will be allowed, and good testimonials as to character, experience, and utility, will be required.

The Committee will meet on Thursday, the 31st inst., at the Cardiff Arms, Cardiff, at Eleven o'clock of the forenoon, to receive applications; and in the meantime any further information may be obtained of Mr. John Forrest, Navigation House, near Cardiff.

WILLIAM CRAWSHAY, Chairman of the Committee.

WANTED IMMEDIATELY, an efficient CAPTAIN for a TIN MINE in DEVONSHIRE.—Address, enclosing testimonials, and stating the amount of salary required, to "R. K. M.," at the office of the *Mining Journal*, No. 26, Fleet-street, London.

TO CAPITALISTS.—The INVENTOR of an IMPROVE- MENT in STEAM PROPULSION, by which steamers running (for instance) from Liverpool to New York will be enabled to perform the voyage in a day less than they now do, is desirous of EXTENDING his PATENT to AMERICA; and any Party ADVANCING ONE HUNDRED and FIFTY POUNDS, to pay the cost of taking out the patent, shall be entitled to ONE-THIRD SHARE in the same.—Address "Alpha," at the office of the *Mining Journal*, 26, Fleet-street, London.—N.B. No party will be treated with until the inventor is satisfied as to his respectability.

TO BE LET, for any term of years the taker may desire, a SLATE QUARRY, at WELLTOWN, within a mile of the Harbour of Boscastle, now in the occupation of Mr. Avery, of Boscastle, the proprietor, to whom applications may be made.—Boscastle, May 19, 1851.

OLD IRON RAILS.—WANTED, a QUANTITY of DOUBLE-HEADED or FLANGE RAILS, of good make, delivered in London. Contractors' rails will not do.—Apply, with full particulars and terms, to Messrs. Wm. Short and Co., 1, Newman's-court, Cornhill.

ON SALE, at the CAETAN-Y-GRAIG MINE, near the Westminster Mines MOLD, a CONDENSING STEAM-ENGINE, 21-inch cylinder, 5-feet stroke, with bright hand-gear, &c., nearly new, and in excellent working condition. Also, ONE BOILER, 20 feet long and 3 ft. 9 in. diameter, with steam and feed-pipes connected to the engine.—Application to be made to Mr. William Clemence, Westminster Mines, near Mold; or to Mr. W. B. Dyer, Mold, Flintshire.—June 18, 1851.

NORTH TAMAR SILVER-LEAD MINE.—Mr. J. LANE, No. 52, THREADNEEDLE-STREET, CITY, has FOR SALE SHARES in the ABOVE MINE.—July 11, 1851.

THE WELSH POTOSI.—To be SOLD, FIVE HUNDRED (2000ths) SHARES in these celebrated MINES.—Applications, until the 31st inst., to be made to Matthew Francis, 7, John-street, Adelphi, London, where all information respecting the same may be obtained.—July 7, 1851.

WHEAL ANNA CONSOLS MINE (Offices, Winchester- house, Broad-street).—NOTICE.—On and after MONDAY, the 14th inst., the BANKERS' RECEIPTS may be EXCHANGED for CERTIFICATES.—July 12, 1851.

CEFN GWYN SILVER-LEAD MINE, Cardigan, Wales. —A SPECIAL GENERAL MEETING of the shareholders in the above Mine will be HELD at the Offices of the Secretary (Mr. John Bowes), 41, Threadneedle-street, City, on Wednesday next, the 16th inst., at Twelve o'clock punctually.—July 9, 1851.

OKEL TOR MINE.—Notice is hereby given, that a GENERAL MEETING of shareholders in the above mine will be HELD at the Golden Lion Inn, Plymouth, on Thursday, the 17th day of July next, at Seven o'clock in the evening precisely. WILLIAM CHANNING, Purser.

7, South-street, Exeter, July 7, 1851. JOHN JURY, Secretary.

CONSOLIDATED COPPER MINES OF COBRE ASSO- CIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this Association will be HELD at the office of the Company 26, Austinfriars, on Tuesday, the 15th day of July next, at One o'clock precisely; and Notice is hereby also given, that at the said Half-yearly General Meeting the Election of a Director of the Company will take place, to supply the vacancy in the direction occasioned by the death of the late Sir John Pirie, Bart. Proprietors intending to offer themselves as candidates will please to give notice of such their intention, in writing, addressed to the Secretary, 14 clear days before the day of election.

By order of the Court of Directors,

26, Austinfriars, June 25, 1851. WM. LECKIE, Secretary.

ROYAL SANTIAGO MINING COMPANY.—The Directors of this Company hereby give Notice, that they have made a CALL upon the shareholders of TWO POUNDS per share, to be PAID to Messrs. Glyn and Co., the bankers of the Company, on or before the 15th day of September, 1851.

By the terms of the agreement constituting the Company, all shares of those proprietors who do not pay the said call of £2 per share within 30 days after the said 15th of September, will be absolutely forfeited.

The form to make the payment will be delivered upon application at the office of the Company.—38, Broad-street-buildings, July 9, 1851.

TINCROFT MINING COMPANY.—Notice is hereby given, that the ADJOURNED GENERAL MEETING of shareholders will be HELD here on Thursday, the 17th July next, at Three o'clock precisely.

Salvador-house, June 27, 1851.

TINCROFT MINES.—The COMMITTEE of INVESTIGA- TION beg to inform the SHAREHOLDERS that their REPORT may BE HAD at the OFFICE of the COMPANY, Salvador-house, Bishopsgate, on WEDNESDAY, the 16th inst.—July 11, 1851.

THE AUSTRALIAN MINING COMPANY— (OFFICES REMOVED from Adelaide-place to 19, BIRCHIN-LANE).

The Board of Directors hereby give Notice, that agreeably to the provisions of the Deed of Settlement, the SIXTH ANNUAL GENERAL MEETING of the shareholders of this Company will be HELD at the London Tavern, Bishopsgate-street, on Monday, the 28th July inst., at Twelve o'clock precisely, to receive the report, accounts, and balance-sheet for the past year; to elect two directors, in lieu of two who go out by rotation; and to fix the remuneration of the present auditors for the past year.

July 11, 1851. T. W. PLUM, Secretary.

MINING INVESTMENT.—A LIMITED NUMBER of SHARES will BE DISPOSED OF to respectable parties on very MODERATE TERMS, in one of the most promising, productive, and best-situated, SILVER-LEAD MINES in CORNWALL—nearly £7000 worth of ores having been raised above the 25 fathom level, and two other levels, a 35 and 45, unwrought, just coming into operation.

Apply to Mr. Richard Thomas, Mining Agency Office, 8, George-yard, Lombard-street.

MINING OFFICES, No. 75, OLD BROAD-STREET.— Mr. T. P. THOMAS begs to inform his friends that he has REMOVED from No. 3, George-yard, to the ABOVE ADDRESS, where he hopes to receive a continuation of their favours.

MINES.—MOLYNEUX & CO., MINING and GENERAL SHARE AGENTS, 34, THREADNEEDLE-STREET, 6, FINSBURY-PLACE SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment.

MOLYNEUX & CO., grateful for past favours, beg to call the attention of their friends to their newly-occupied OFFICES, No. 34, THREADNEEDLE-STREET, where every attention will be paid to the PURCHASE or SALE OF SHARES.

*** Office hours from Ten to Four o'clock.

THE PATENT OFFICE AND DESIGNS REGISTRY.
No. 156, STRAND (removed from 210), *LONDON.*

INVENTORS will receive (gratis), on application, the OFFICIAL CIRCULAR OF INFORMATION, detailing the eligible course for PROTECTION of INVENTIONS and DESIGNS, with Reduced Scale of Fees.

Messrs. F. W. CAMPIN and CO. offer their services, and the benefit of many years' experience, in SECURING PATENTS and REGISTRATIONS OF DESIGNS, with due regard to VALIDITY, economy, and dispatch—assisted by scientific men of repute.

Also, in MECHANICAL and ENGINEERING DRAWINGS, whether connected with Patents, Railways, or otherwise, by a staff of first-rate draftsmen.

Application personally, or by letter, to F. W. Campin and Co., No. 156, Strand (removed from 210), London.

ATMOSPHERIC INFLUENCES.—NEW SERIES—No. IX.

BY FRANKLIN COXWORTHY, AUTHOR OF "ELECTRICAL CONDITION."

Of the atmospheres that prevailed during the carboniferous period, carbonic acid and nitrogen, we have shown how, under the influence of vegetation, agreeably to existing principles, the former was disposed of, and succeeded by an oxygen atmosphere. To oxygen we have ascribed a high electrical condition, to which in the atmosphere is referable, properly speaking, evaporation; not the mere conversion of water into vapour, as under the influence of fire, which immediately undergoes condensation by contact with the air, but a separation of its gases to such an extent as shall preclude their re-combination without the agency of electricity—some such action, in fact, as that which is more fully developed in the galvanic battery, and must be in operation during the evaporation of ice. Vapour is a compound of two volumes of hydrogen to one of oxygen, the respective specific gravities being 0·0692 and 1·1111; if, therefore, the specific gravity of these three volumes be added together, and divided by three, it will give a mean for the compound gas formed by evaporation of 0·4165, or rather less than half the specific gravity of atmospheric air, and, consequently, possesses a high ascending influence, and as generated would pass through the oxygen and nitrogen, and take up a position on the exterior of the atmosphere.

There are certain principles so nicely defined, that to be comprehended require a most close investigation; but which, when understood, present to the mind most striking illustrations of the simplicity of purpose which direct our MAKER'S works; and, perhaps, there is not to be traced in the whole economy of Nature any one condition more illustrative of this than the relative affinity which oxygen has for hydrogen and carbon under different circumstances. If a mixture be made of the vapour of carbon, hydrogen, and oxygen—such as olefiant gas and oxygen—in the proportion that the oxygen shall suffice only to convert the hydrogen into water, and the mixture be fired by the electric spark, the oxygen will combine exclusively with the hydrogen, and the whole of the carbon will be deposited—a more familiar illustration of the principle being afforded by blackening a piece of glass or plate over a candle; and it may be said to be in constant operation in the deposition of soot in our chimneys. But if, on the contrary, the hydrogen and carbon be presented to the oxygen under the influence of a low electrical action—such as that which governs putrefaction and decay—the order of things is completely reversed; the oxygen combines with the carbon, to the exclusion of the hydrogen, which then enters into combination with the nitrogen and excess of carbon of the putrefying or decaying matter.

In the paper which we submitted to the consideration of the Board of Health in 1848, in reference to epidemic and other diseases, reasons are afforded why the animal kingdom, when in a healthy state, should be negatively electric, and not positively electric, as generally supposed; consequently, all our functions are entirely of a putrefactive character; when, therefore, air is taken into our lungs, its oxygen combines with the carbon of our blood, generating carbonic acid, and ammonia is evolved in large quantities; but if, on the contrary, from any cause, the electrical condition of the frame be changed, and our body becomes positively electric, the functions of respiration are suspended, accompanied by copious watery discharges, and we are reduced to a cold, emaciated, debilitated mass. Artificial light has hitherto been referred to the luminosity of the carbon induced by the heat of the hydrogen; we contend, on the contrary, that it is merely the effect of the high electrical atmosphere that surrounds a negative body, the compound flame maintaining an electric state analogous to the flash of lightning which illumines the atmosphere for miles around, obviously without the presence of carbon; be this, however, as it may, it is obvious that if during combustion oxygen had a preference for carbon, the whole of the hydrogen would escape unconsumed, and gas would be utterly useless as an illuminating agent; the light from a candle being at no time greater than is afforded by its snuff when the flame is blown out; and although with the present mal-constructed furnaces for steam purposes but little benefit is derived from the high heating properties of the hydrogen of coal, were the affinities reversed, that little advantage would be lost; whilst on the principles of electrical condition there could be no difficulty in constructing a furnace that should consume not only all the hydrogen, but also the carbon that now constitutes the smoke nuisance of towns.

Applying, then, these principles to our oxygen atmosphere, that gas by its influence on the masses of dead vegetable matter of that period, converted the whole of the hydrogen into a light carburet—the specific gravity of which is 0·5555—imparting to this gas a high ascending influence; and, in the upper regions, completes the ingredients requisite to the formation of snow—the *rationale* of which was given in No. VIII.; and as there shown, by the formation of ammonia, brought down the nitrogen atmosphere, which, under the influence of the vegetable kingdom, by combination with the oxygen of the carbonic acid, formed by the action of the oxygen atmosphere on the dead matter, constituted through an immensity of time, the air we now consume by combustion and respiration; and, as we have demonstrated, is re-generated by the vegetable kingdom, thereby connecting the chain of this important branch of Nature's economy.

To this action of oxygen on woody fibre we ascribe the formation of anthracite. Through some of the beds in the coal-fields of America cuttings are made for roads to a very considerable depth. That this matter was not formed under the influence of "heat" is self-evident, since, if it were, other matter of a cold formation, such as carbonate of lime, would likewise show effects of the action of that agent. We have, therefore, ascribed to it—as having reference to the successive atmospheres—a period ulterior to the coal formation, the matter of which has undergone decomposition *per se* after deposition in its present position, and on the top of which it should, as a general rule, rest; but in opposition to this, it has been urged by a correspondent, to whose opinion we attach much importance, that in "South Wales, where our anthracite is found, the anthracite coals are not only the *lowest* beds in the formation, but there is so little distinction in point of time, that the identical same beds of coals, which are highly bituminous and flaming on the eastern edge of the basin, are at the opposite southern extremity, two miles distant, purely anthracite. It begins first in the lower seams, which pass gradually from bituminous to free burning—that is, flaming without bitumen—until they acquire the anthracite condition, which is merely the *abstraction of the whole of the hydrogen that originally belonged to the woody fibre*." Now, the action of the oxygen on the woody fibre could take place only through the medium of water, in which oxygen is highly soluble, and subsequently to the deposition of the coal beds an uplifting or, as the geologists have it, an upheaving took place, by which vast fissures were made in the earth, through which openings, we conceive, was conveyed the water *to that portion of the lower beds* that are converted into anthracite. That some such agent produced the effect is evident, or else why is only a portion of the same bed converted into anthracite?

MOTIVE-POWER.—Mr. E. Dunn, of New York, has patented an improved engine for producing motive-power by the dilatation or expansion of certain fluids or gases caused by the application of caloric. The patentee describes two arrangements of machinery for obtaining motive-power by the dilatation of air or fixed gases, the caloric absorbed by the air during the heating process being surrendered, and again employed to heat a fresh supply. By this means a constant circulation of caloric is maintained, and the furnace employed only to supply the amount of heat lost during its transference from one supply of air to another.—*Claims*: 1. A regenerator, whereby the caloric in the air or other circulating medium, as it passes from the cylinder, is transferred to a series of discs of wire net or minute mineral or metallic particles, and again delivered to the working medium, either at stated intervals or at each successive stroke of the piston.—2. The combination of an expansion heater with the working cylinder, by which the fall of temperature consequent on the expansion of the circulating medium during the upward stroke of the piston is restored, and the force of the piston augmented to a greater extent than if no such re-transfer of heat took place.—3. A heat-intercepting vessel attached to the working piston, by which any injuriously high temperature is prevented from reaching the packing of the piston, and by which also the very desirable end is obtained of presenting always surfaces of uniform high temperature to the acting medium under the working piston.—4. Placing the working and supplying cylinders in an inverted position, and leaving their ends open.—5. The direct attachment of the working and supplying pistons, by which arrangement the acting and re-acting forces are uniformly distributed, and the maximum working effect of the pistons obtained.

TAKE HOLLOWAY'S PILLS IN CASES OF DERANGED HEALTH OR IMPURITY OF THE BLOOD.—This inestimable medicine is a superior remedy in all cases of determination of blood to the head, benumbed feeling in the limbs, impaired health, impurity of the blood, drowsiness, swimming in the head, disordered stomach, loss of appetite, bad digestion, and debilitated constitution. The number of persons cured of these afflictions by Holloway's pills is incredible, and many of them had been for a long time sufferers, and had failed to get relief from medicines prescribed by the first doctors in the profession. A steady course of these pills will restore the most weakly to a vigorous state of health.—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand.

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Proceedings of Public Companies.

COLONIAL BANK.

The half-yearly meeting of proprietors in this company was held at the London Tavern, Bishopsgate-street, on Tuesday, the 8th inst.,

CHARLES MARRYAT, Esq., in the chair.

C. A. CALVERT, Esq. (the secretary) read the notice convening the meeting, and the following report and balance-sheet:—

DIRECTORS' REPORT.

The directors now submit to the proprietors the statement of the debts and assets of the corporation, as required by the Charter, made up at the branches to Dec. 31, 1850, showing also the profit made by the bank during the half-year ending at that period—viz.:

DEBTS.

Circulation	£175,337	5	0
Deposits and other liabilities	783,344	2	4
Paid up capital	500,000	0	0
Fund to meet bad debts	71,761	9	11
Profit	14,210	2	4
Total	£1,484,552	19	4

ASSETS.

Specie	£220,978	14	6
Due to the bank in the colonies on bills discounted and purchased, including those past due	690,445	13	0
Due to the bank in the colonies on cash credits and current accounts	175,327	18	3
Due to the bank in London on bills remitted, cash at bankers, &c.	384,645	6	2
Bank premises and furniture in London and the colonies	13,155	7	5
Total	£1,484,552	19	4

The present position of the corporation is so nearly similar to what it was at the last half yearly general meeting, that the directors have no new matter upon which to found a lengthened report. The collection of the doubtful outstandings is proceeding, as they expected slowly, but not unsatisfactorily; and their anticipation has been verified of increased operations and profits at the branches, not only as regards the half-year now reported upon, but also that which has just terminated, up to the period of which the directors have, thus far, received the accounts; and as those operations are based upon sound banking principles, they will, doubtless, continue to prove both safe and remunerative. With respect to the dividend, the directors recommend a continuance of the same prudent course which has been pursued for several half-years, feeling assured that such line of conduct is better calculated than any small increase to restore the shares of the corporation to their justly intrinsic value; they, therefore, trust the proprietors will agree with them in thinking that a dividend of 1*l.* per cent. should now be declared out of the net profits of the half-year ending 31st December, 1850, amounting, as per preceding statement, to £14,210 2 4

Which, upon the paid-up capital, will require 5,000 0 0

Leaving £ 9,210 2 4

To be added to the "fund for bad debts," amounting, as per statement, to 71,761 9 11

Which will increase it to £80,971 12 3

THE CHAIRMAN: The report you have just heard gives the reason why it is so short; and for the same reason I have very little to add to it. You have seen that the business of the bank has not been liable to any particular obstacle or difficulty, but that the profits of the past half-year show an excess of 2000*l.* over those of the corresponding half-year. There is nothing, I think, I have to communicate in addition, without any shareholder present has a question to put, to which I will endeavour to give as satisfactory an answer as I can. (Hear.) I shall, therefore, move that the report and accounts now read to the meeting be received and adopted.—Capt. WHISH seconded the motion.

Major BUCHANAN said they were going on, year after year, and the same indefinite statements were put forward. There was the circulation, &c., but they knew nothing of the bad debts. The directors knew how things were going on, but the proprietors at large knew nothing. It might be prudent that the proprietors should know nothing about the affairs of the bank. (Hear, hear.) Concealment might be prudent, but he never knew it turn out satisfactory in a banking company. After three or four years something ought to be known by the proprietors; it was the course adopted formerly, and why not continue it? They could not come at the assets without the bad debts being known. If any gentleman present thought it prudent, he hoped he would second the motion he should make—"That this meeting adjourn to the second Tuesday in next month, to enable the directors to place a more explanatory report before the proprietors." He thought no harm could arise from this; if so, the directors could publicly state it. Why should not some means be adopted by which the present nominal price of the shares could be reduced, so that those who knew nothing about their affairs could become the less responsible? They were at present liable to a very large amount of responsibility, without knowing anything of the concern in which they were engaged. He spoke this without any invidious feeling towards the directors; he simply asked if any such plan could be devised. No doubt some of the proprietors who were largely interested would like to have some of this responsibility taken off their shoulders.

Mr. VALPY said it was usual on these occasions to state the losses. He would not press the question, but he thought it would be very satisfactory if the chairman could merely state that they had not increased. He did certainly think that the directors might be content with retaining one-half of the profits, instead of two-thirds, as it would make a considerable difference in their dividends.

The CHAIRMAN: 210,000*l.* was mentioned by me originally as the amount of loss incurred by the bank. Every half-year we continue to make an estimate, and I have no reason to suppose that the estimate we made then was not ample. (Hear, hear.) As to the question how far we shall get in the outstanding debts, I may say that we have no reason to be dissatisfied with the appearance of them up to the present time. (Hear, hear.) With regard to the liabilities of the proprietors, I am informed that the amount could not be altered without a new charter. As to the statement of general losses, there is no doubt the time must shortly arrive when more detailed accounts will be given to the proprietors; and, as far as the directors are concerned, I may say that they are perfectly willing to do so. (Hear, hear.) This will be as soon as they think the interest of the corporation will justify it; but at present the board think it would be unadvisable. (Hear, hear.)

Mr. VALPY: That 80,000*l.* is security against the 210,000*l.*, which reduces it to 130,000*l.* (Hear.)

Mr. CAVE (deputy chairman): Certainly.

Mr. CUNDELL thought fuller accounts should be given. He attributed the low price of the shares to the want of an accurate knowledge of the losses incurred. Under that impression he should second the amendment of the hon. proprietor.

Mr. CAVE was glad to hear the gallant major say that he was not a man of business, and that it was very possible that many of his remarks might not be to the purpose. The directors had never concealed anything which they ought properly to communicate to the proprietors; but he would appeal to all gentlemen in that room, who were men of business, whether it was prudent, wise, or honourable, to publish to the world at large the transactions of the respectable individuals who had dealings with this corporation? (Hear.)

Mr. CUNDELL: The amounts only.

Mr. CAVE: I will ask, as bankers, whether it is consistent with our security to do so? If we are to tell all our transactions with private persons publicly to our proprietors every half-year, we may as well close the bank altogether. Everything that ought to be communicated will be communicated, and has been communicated; there has been no concealment. I stated, two years ago, that I estimated the losses of the bank at 200,000*l.*, in which I was nearly right; for the chairman stated afterwards that he considered them to be 210,000*l.* I hope the majority of proprietors here assembled will repudiate the remarks and insinuations thrown out by one or two honourable gentlemen present. Did I not feel that such remarks came from a single proprietor, instead of from the shareholders at large, I should not remain at all comfortable in holding my position, and should know at once what steps to adopt. (Hear.) With gentlemen of known credit and honour it is not the mere emolument of directors which induces them to undertake such anxieties, but the consideration that they are, by holding such situations, enjoying the confidence and esteem of their brother-shareholders and fellow-citizens. (Hear.) If such observations as have been made are generally participated in, then we lose the confidence of the proprietors (no, no); and I for one would no longer continue to manage your affairs. (Hear.) If you carefully notice the report, you will see that a good and steady branch of business is now springing up in the British West India colonies, and into which business we can enter with profit and security. I was one who thought this was a favourable time to give you a small increase of dividend (hear), but I was overruled by your board of directors; and I am bound to consider they acted wisely, and that my idea was premature. No doubt the time is not distant when the directors will come forward to increase moderately your dividends, founded on the increased profits of the bank. (Hear.) Your directors are not like the directors of a dock or of a railway company; for I can assure you I carry to my private home many of the anxieties and troubles which necessarily belong to a great banking establishment. (Hear.)

Mr. J. A. HANKEY said he thought, as a banker, that their management ought to be secret. No banker would publish the affairs of other people; many of them being his debtors, it would be in the highest degree imprudent. The chance of getting in these things depended on the prosperity of their debtors; must it not, then, be very unwise to publish to the world that they owe large sums of money to this establishment? Such a course would destroy their chance of getting back what was owing to the concern. The information could only be elicited by a committee of inquiry. (No, no.) He thought they could not do better than continue their confidence in the directors, instead of thinking of a committee, or sending back this report to be amended. (Hear, hear.)

A PROPRIETOR said that, although he thought they had not all that information they were entitled to, he could not help expressing his great satisfaction at the increase of the bank's deposits to 723,244*l.* against 618,000*l.*, which was the amount at the last half-yearly meeting. (Hear, hear.)

Mr. BASSETT observed that the sooner they wiped off the bad debts the better. He did, however, think that the proposition made by a gentleman on his right, and seconded by a gentleman on his left, in the present state of the business of the bank, would be very unwise to follow. (Hear, hear.) He did think that, after all, they ought to feel obliged to the directors for their able performance of the onerous duties which necessarily devolved upon them in conducting a business of this magnitude, particularly after the fiery ordeal they had gone through. (Hear, hear.) They now heard that things had been improving, and that the present business was conducted on strict banking principles; and he, therefore, thought the proprietors might feel satisfied. He did think that the course the directors were now pursuing was the wisest and best for the interest of the proprietors, and he had no doubt that before long the proprietors would receive a larger dividend. Taking this view of the subject, he hoped the amendment would be withdrawn. (Hear, hear.)

Major BUCHANAN said he had no wish to expose the affairs of private individuals, nor did he doubt the honour and integrity of such a respectable board of directors, for he was only seeking for information. If the directors thought it would be better for him to withdraw his motion, he would do so, with the consent of the seconder. (Hear, hear.)

Mr. CAVE hoped the honourable gentleman would accept of his apology for anything he might have unintentionally said displeasing to him. He could not help looking upon such a motion as he had proposed, if carried, as amounting to a want of confidence in the directors. (Hear, hear.) He should certainly be obliged to the gallant officer to withdraw it, and likewise to the hon. proprietor, who seconded it, if he would do the same. (Hear, hear.) He wished it to be understood that the directors were quite willing to tell the proprietors, as their partners, all things that would interest them, but they questioned the advisability of giving such extended information in a report which would be published to the world at large. (Hear, hear.)

Mr. CUNDELL also withdrew the motion.

The report and accounts were then adopted unanimously.

The CHAIRMAN moved that a dividend of 1 per cent. for the half-year be now declared.—Capt. WHISH seconded the motion, which was passed unanimously.

The CHAIRMAN said, the proprietors were naturally anxious to receive an increase of dividend. He longed for the time to arrive, for it would be very agreeable to the directors; to the proprietors it would, no doubt, be a very popular measure.

Major BUCHANAN then moved a vote of thanks to the chairman, deputy-chairman, and directors of the bank.

Mr. CUNDELL seconded the motion, which was passed unanimously.

The meeting then separated.

BRITISH AMERICAN LAND COMPANY.

A special meeting of this company was held at the offices, New Broad-street, on Monday, to receive from Mr. Galt, the company's commissioner in Canada, now on a visit to this country, a statement as to the position and prospects of the company.

A. GILLESPIE, Esq. (the governor), having taken the chair, and explained the objects of the meeting,

Mr. GALT entered into a very voluminous statement with regard to the affairs of the company, from which it appeared that the total capital of the company amounted to 233,065*l.*, and the assets, debts secured on land, 74,367*l.* 18s. 11d.; railway stock, 22,500*l.*; bills and securities, 8765*l.* 3s. 8d.; cash, 1341*l.* 9s. 4d.; landed property, 581,575 acres, valued at 5s. 3d. per acre, 99,367*l.* 15s.; Sherbrooke, 20,175*l.* 0s. 9d.; and Port St. Francis and other property, 6638*l.* 2s. 2d. The large losses which the company at one time sustained were owing to the Government tax on the lands, which had since been removed, and the company had now an income of upwards of 6000*l.* a year, principally arising from the interest on the monies for which lands were sold—credit being given on the security of the land for 14 years. He had no doubt that a great improvement in the value of their property would take place on the opening of the St. Lawrence and Atlantic Railway, 72 miles of which would be completed in August. The contractors were now at work on a continuation of the line to Sherbrooke, an additional distance of 23 miles; and he had no doubt that the whole of it would be completed, and at work, within two years. The total cost of the railway would be 800,000*l.*, of which the Government had advanced 400,000*l.*, taking a first charge on the profits of 3 per cent., and this company, with the seminary of St. Surplice, had a second charge for interest on the amount they had advanced. Sherbrooke was most advantageously situated for a manufacturing town, and all the cotton, paper, and other manufactures hitherto produced found a ready sale in Montreal, and there could be no doubt that the trade of the town would greatly increase with better and shorter means of intercommunication, such as would be afforded by the railway. He had no doubt that the St. Lawrence and Atlantic Railway would pay equal to the railways in the United States, similarly situated, or about 6 per cent., and that their landed property, which had increased in value 2d. per acre since the last survey, seven years ago, would be still further augmented in value; and that with convenience of access there would be a large demand for their lands. In order, however, to create that demand, and render their lands valuable, it would be necessary to incur further expenditure in making new roads, which must be met either by borrowing money or out of the annual revenue. On the whole, he considered the company to be in a very good position, and looked to the shares within a very few years going up to par.

Some conversation ensued, in which an opinion was expressed that it would be better to apply the accruing revenue to effecting the required improvements in the company than to borrow money; but no resolution was come to on the subject, it being left to the discretion of the directors and manager. The directors and manager were also cautioned to use the utmost economy in carrying on the works, and as far as possible to confine themselves to the legitimate business of the company—that of selling lands—which Mr. Galt and the chairman explained could not always be done, as without the assistance of the company many manufactories could not have been established in Sherbrooke, by which the property of the company was greatly improved in value.

A vote of confidence in Mr. Galt and the directors, with thanks to them for the explanations they had afforded to the proprietors, was moved by Mr. Sandoz, seconded by Mr. Scott, and passed unanimously.

Mr. M. CLARKE supported the motion, although he was one at the last meeting to object to Mr. Galt's proposition for spending money on the railway. He now thought otherwise, and that such a measure would greatly contribute towards the prosperity of the company. (Hear, hear.)

The CHAIRMAN returned thanks, and said that as far as this company's investment in the railroad went, they could now realise 12,500*l.* for their 25,000*l.*, which was not a very bad symptom of the future. (Hear, hear.)

The meeting then separated.

LEGAL AND COMMERCIAL FIRE ASSURANCE SOCIETY.

The annual meeting of this company was held at the establishment in Cheapside, on Wednesday, the 2d inst.—Mr. Alderman LAWRENCE in the chair.

Mr. BOWSER (the secretary) read the following report of the directors:—

In presenting this report of the affairs of the society, the directors have several points of interest to communicate, in evidence of the steady progress made by the office in the past year, and as indicating a future prospect still more encouraging.

During the year the agents appointed, the number of policies issued, and the income derived, have all been considerably augmented. The new policies issued have been 2543 in number, averaging 817*l.* each, whilst the original and early assurers having continued their support to the office, the income of the society has been raised from 8228*l.* to 10,290*l.*, or 25 per cent. increase; on the other hand, the expenses of the office have been reduced. The establishment of a large and respectable agency has still received considerable attention from your directors, and they have the pleasure to report that 121 new appointments have been made of agents, in good standing as professional or business men. The total number of agents is now 587, through whom a large proportion of the business has been received, and who will, without doubt, greatly extend the business of the society.

It will be observed that the claims paid in the year are larger than the proportion paid in the previous years—viz., 7465*l.*, but this includes 5000*l.* belonging to the last year, as reported at the annual meeting.

The gross amount of premiums received in the past four years, as compared with the claims paid, show decidedly that the business of the office is well selected, and the claims only on a fair average; thus, the gross premiums received have been 28,256*l.*, and the claims paid 15,947*l.* Your directors can add, with pleasure, that these claims having been met with promptitude, have been productive of considerable additional business.

Your directors have deemed it advisable to become subscribers to the London Fire Engine Establishment, at a future cost of 40*l.* per annum, whereby the large sum now assured by the office in London comes under the charge of trained and experienced firemen, who not only attend to stay the progress of the flames, but after extinguishing a fire remain in charge of the premises for the protection of the salvage, thus rendering important services to the office.

In the report made two years since, reference was made to the assurance of certain large classes of risks of a somewhat more hazardous nature than those previously accepted (but by no means of extreme hazard). Your directors are now enabled to state that a considerable business has been done in the class referred to, and the result, up to this period, has been very favourable to the interests of the office. The directors who go out of office by rotation are Henry Charles Chilton, Esq., William Lawrence, Esq., alderman, John Falshaw Pawson, Esq., and Walter Charles Venning, Esq., and being eligible offer themselves for re-election.

Your directors recommend that interest at the rate of 5 per cent. be paid to the shareholders on the amount of their paid up capital. In conclusion, your directors again refer with considerable satisfaction to three points—the steady support continued to the office by its original and early assurers—the increase of 25 per cent. in the business transacted during the past year—and the widening field of operations still within reach of the society; and are confident that the basis of the office is firmly secured, and its complete success certain. On these grounds the directors strongly urge the shareholders to continue their zealous exertions to promote the interests of the society.

The CHAIRMAN, in moving the adoption of the report, congratulated the meeting on the steady and satisfactory progress of the society.

Mr. COX seconded the motion, which was passed unanimously.

A dividend of 5 per cent. for the past year was agreed to. The election of directors mentioned in the report took place.—After a vote of thanks to the chairman, directors, and auditors, the meeting separated.

At the meeting of the Imperial Fire Assurance Company, the usual dividend of 3*l.* per share for the half-year was declared, besides a bonus of 10*l.* per share, making a total of 13*l.* per share.

THE LIFE OF A DOG.—A short time ago a large dog, belonging to Mr. H. Graham, agent, Pease's West Colliery, near Crook, fell into a pit, 35 fms. deep, not then in work. About three weeks afterwards, some one, on going down to clear the air-course, in order that mining operations might be recommenced, found the dog alive at the bottom of the shaft! Unfortunately, however, the cage came in contact with it, and it was killed. The dog had traversed all the workings, as was ascertained by the prints of the feet; yet the air in the pit was considered to be so foul that no person could breathe it and live.

Original Correspondence.

STATISTICS OF COPPER, LEAD, AND TIN.

SIR,—I have attentively perused the foregoing in the last week's Journal, and find the returns made to be as follows during the last quarter:—

86 Copper mines produced			£201,655	14	0
62 Lead mines	,,		104,720	10	7
16 Tin mines (2 of which are in the copper)	..		18,860	8	0=£325,236 12 7

only 164 mines, while your British Mining Share List teems with more than double that number, *so that, in fact, one-half those in that list are making no returns at all!* This speaks volumes; numbers of them are in *statu quo*, standing with the figures of "last price" attached, without any notice being taken of them for several months past. In numerous instances not half the sum named could be obtained for the shares, and it is high time that pretty many of them were *non est*. "Wise men wonder, good men grieve,
Knaves deceive, and fools believe."

The division in your list, as it now stands, would admit of but one further improvement. The dividend mines 63, are, as they should be, properly classified, and it behoves the managers of those where the amount per share actually divided has not yet been filled in (as in a few instances), to supply the particulars forthwith—that list will then be all that can be desired.

You have still 305 others, occupying nearly three columns; and if it could be made into two lists it would be as well, distinguishing those in produce from those in *statu quo*—doing nothing, and scarcely ever heard of, except in the event of a call, adding thereto all those from whom you never receive any report as to the underground operations, if they have any.

I am well aware that numerous tin, and a few more lead mines, sell their produce by private contract, consequently do not appear in the quarterly returns, while they are in the Share List. Still the number does not affect my statement, which is that less than one-half the 370 odd mines upon your last list are not selling either copper, lead, or tin, though they are extracting lots of gold and silver from the pockets of their shareholders. It would be a thankless task to endeavour to weed it of these impurities by pointing them out, and I shall not be the one to attempt it. The number of letters of complaint that have reached my hands upon this subject prove that a great deal of imposition has been practised, and, generally speaking, my advice has been—put up with the first loss, get rid of your shares at any sacrifice, and in future consult a practical mine agent before parting with your cash, in preference to doing so afterwards. This advice I recommend to all as an unerring maxim to be observed. Legitimate mining, honestly pursued, will pay handsomely, and shall ever receive support from the pen of—ARGUS: *Truro, July* 8.

THE CENSUS FOR CORNWALL—1801 AND 1851.

SIR,—The census recently taken of the population of this mining county affords some statistical particulars that I conceive to be worthy of notice in your Journal. It is known the county consists of 14 unions, including the Scilly Islands. The total population and most populous parish are thus given for every 10 years of the last half century:—

In 1801 there were	193,039	inhabitants, and Madron had the largest number,			4940
In 1811 ,,	221,424	,,	(increase 28,385) Redruth	,,	5903
In 1821 ,,	262,156	,,	(increase 40,732) Madron	,,	7235
In 1831 ,,	302,494	,,	(increase 40,338) St. Austell	,,	8758
In 1841 ,,	343,321	,,	(increase 40,827) Madron	,,	11,144
In 1851 ,,	355,276	,,	(increase 11,955) Camborne	,,	12,887

Madron is in the far west, extending from the Land's End to Penzance, Marazion, St. Ives, and St. Just. In this, the most healthy district probably of all England, the prosperity of the tin mines, assisted by certain rich ones yielding copper, the important fisheries at Mount Bay, Newlyn, Mousehole, and St. Ives, to which may be added the agricultural and farming population, extending over a vast quantity of rich arable land, accounts for it having half a century ago the largest number of inhabitants of either union, and maintaining that position 20 and 40 years after, still standing on the last census as second only to Camborne, by 1743 less in the population.

Redruth, in 1811, with 5903 inhabitants, was the largest of the 14 unions; this is accounted for by the increased demand for labourers in the numerous copper mines around, which, by various improvements in the machinery and steam-engines, were enabled to be sunk to a deeper level, consequently requiring additional hands to explore them. When the demand for mining labourers increases in any district, it is soon supplied from others, and although the copper tributers generally know very little about tin or lead, or the tin miners little about lead or copper, still they serve in cases of necessity to assist in tutwork and surface labour, moved to whichever district they may be. Redruth has justly been considered the centre of the great western mining district, and as regards population, according to the recent census taken, stands third on the list, for 10,571 inhabitants.

St. Austell stood as the largest in population in 1831, owing to the extensive mining operations carrying on by the late J. T. Treffry, Esq., of Place-house, Fowey; probably there never was one individual in the county who gave employment to an equal number of persons as this truly lamented gentleman. He embarked a large property in mining, smelting, and agricultural pursuits, made canals, railroads, shipping ports, and created large villages from his own individual resources, and prosperity crowned his numerous undertakings. He proved the greatest benefactor to all around him who sought employment, and ended a good ripened age with the blessings of all those who served under him. The china clay works and iron mines in this district give employment to a large body of people, and around are several spots congenial to the farmer and agriculturist's calling, that makes it a very interesting locality, having the advantage of being close to the shipping ports of Charlestown, Fowey, Mevagissey, Pentuan, &c.

Camborne, by the present census, stands the highest as to population—viz., 12,887; it is situate 3¼ miles west of Redruth, and may be said to be the seat of mining prosperity. Between it and the latter town are the following rich and profitable mines now at work—viz., Carn Brea, Bassett, Buller, North Basset, South Frances, Seton, North Pool, North Roskear, and South Tolgus, all making dividends, besides others promising at an early day to do so, as Condurrow, East Pool, Agar, Dolcoath, Cook's Kitchen, &c.

The greatest increase according to present census has been at Liskeard, 7317; Redruth, 5520; Penzance, 3342; the former is accounted for by the prosperity that has attended mining operations in that district in the last 15 years. The profits derived from Caradon, south and west, has, however, induced scores of setts to be taken up in the locality by other individuals, who have been unsuccessful in their operations; the only benefit derived therefrom as yet has been employment to the labourers, profit to the merchants, and salaries to those concerned. Redruth and Penzance have already been treated on.

The total increase in nine unions amounts to	18,844
,, decrease in five unions amounts to	6,889
Total increase for Cornwall	11,955

only, while by the various regestries it is clearly shown that the excess of births over deaths have been 47,511—so that 36,556 persons have emigrated, or quitted the county in the last 10 years. It is known that emigration to South Australia and other foreign mining localities have taken away whole families to a very considerable extent. California has induced a few; America, too, has had her share from among the agricultural districts. The only decrease in population worth noticing is Helston, 4139, and Falmouth 651, the former owing to the shutting up of Wheal Vor, the largest tin mine in the world, and emigration; the latter for the like reason, and losing the packets. ARGUS (of Truro).
July 5.

MINING IN DARTMOOR DISTRICT.

SIR,—A correspondent states that he considers Old Brimpts likely to make a good mine under the present management; he says also that Golden Dagger is a capital little mine, but he fears that those who deserve the praise for it will have to contend with the "snake in the grass;" but I, and others interested, require his reasons for the assertion. Your correspondent further thinks East Birch Tor to be a fair speculation, under an efficient agent. I entirely coincide with him as far as regards each of the mines being a fair speculation; but, on the other hand, I cannot agree to the hints given respecting the management of East Birch Tor. That is our business, and not that of your correspondent, or any body else. We often find, when a "cudden jack" comes from down west of St. Agnes, that he generally tries to find fault with the agents in Devon. Why does not your correspondent point out where improvements can be introduced?—A SUBSCRIBER: *July* 3.

THE MINING EXCHANGE.

SIR,—The present age having many advantages over former ones, as well as reduced prices in mining materials, improvements in machinery, &c., render mining one of the best speculations of the day, provided it be placed on sound bases,—and that principally depends on the caution of the capitalist. Good localities should not only be paid attention to, but the selection of suitable agents (who are not too plentiful): the hands of agents should not be tied, as is too frequently the case, in being sometimes told to go "too fast," and other times "too slow." I suppose the Mining Exchange was instituted with the intention of protecting the capitalist, and, if properly carried out, I believe would be found to answer that purpose, but I shall be glad to know what means the committee have of ascertaining whether any given piece of mining ground is deserving one farthing outlay or not, more than before the Mining Exchange was established, unless it be inspected and reported on by faithful, able, and disinterested parties?

I am persuaded it would be a boon conferred on the commonwealth, if mining could be conducted upon a sound principle; therefore you will do well to recommend that the committee provide themselves with faithful men to inspect and thoroughly investigate every new undertaking, before it shall become current. It may be said, that will be still trusting to human nature; but there should be a check on that. Supposing three or four, more or less, be engaged to inspect and report, either separately or conjointly, as shall be thought proper, for the decision of the committee, whether projects brought forward were eligible or not. Besides, will it not be a check on the parties immediately transacting business within the Mining Exchange, who perhaps require it, and will not object to honest principles? "In the midst of counsellors there is (greater probability of) safety."

We think here that your correspondent, Mr. J. Y. Watson, F.G.S., being the chairman of the Exchange, should devote one of his papers to an exposition of the intentions of the committee. Few know better than him the anxiety with which all their proceedings are contemplated, and he should be one of the last to withhold information.—J. WEBB: *St. Austell, July* 8.

DEPTH OF TIN MINES, AND NATURE'S LAWS.

SIR,—Mr. Ennor having disposed of seven of the mines named by "Practical"—they being copper—I will, with your permission, strike four others off the list—Wheal Lewis, Wheal Tremayne, West Providence, and Wheal Lovel; the three former are in slate, and the latter in granite. From the reports it will be seen that the 90 is the deepest level quoted in Wheal Lewis; the adit may be 20 fms. (*not more*), equal to 110 fms. deep; the ground at present opened at the bottom level cannot be expected to pay half the cost of the mine, were she entirely dependent on that source. Neither Wheal Tremayne nor West Providence Mines exceed 100 fms. in depth in the parts that are now working. The deepest part of Wheal Lovel at the present working is not more than 90 fathoms. So much for "Practical's" facts, not fictions. There now remains little doubt that 11 out of the 22 mines named are not as stated by him—Dolcoath, Cook's Kitchen, Tincroft, Carn Brea, Condurrow, Botallack, and Levant, being copper mines; and Wheal Lewis, Wheal Tremayne, West Providence, and Wheal Lovel, not being below 100 fathoms deep. It is to be hoped that some of your correspondents who are acquainted with the other 11 mines will state whether any, or how many, of them are, as "Practical" asserts, paying profits from the proceeds below 100 fms. deep. I have no wish of entering into the discussion, and merely send you this by way of information. Nor should I wish it to be understood that tin mines do not pay below the depth named; some have been known to do so, and no doubt many more will yet be found.

If your correspondents would carry on their discussions with less personality, it would be more interesting and much more instructive to many of your readers; and if parties would give their names, no doubt many really practical men would be ready to throw some light on the subjects discussed; but there are few who will risk to be called madmen by every would-be practical.

"Practical" states, what appears to be long ago received as a fact, that the tin in our streams was disintegrated from the lodes at a distance, and carried into the valleys by heavy floods. Will he be so kind as to tell us what has changed its nature, for we cannot now find stream tin in the lodes? Was all the stream tin carried into the valleys before our day, or is it still going on disintegrating and accumulating in the valleys? Or, is it, as he says Mr. Ennor supposes, *growing*? If he can assign any good reason why nearly all our streams pay for washing so many times over, it may be turned to some practical use. Perhaps the same law of Nature, for all things are most assuredly governed by Nature's laws, may apply to tin leavings, for it is well known to practical tin miners that a heap of tin leavings will, after a few years, pay for re-dressing. Have fine particles of tin an affinity for one another? Do they, by some chemical action, combine together, and what was, a few years since, so light as to float on water now become so heavy as to bear washing? That such things do occur is well known. Perhaps "Practical," or some other of your talented correspondents, will give their views as to how these changes take place.
Truro, July 8. R. S. BRYANT.

ON NATURE'S LAWS.

SIR,—The answer of "A Practical Miner" is just what I expected. Most men when they fall in a mud pond, are glad to make the best shift they can to get out, and too often turn round and rail at some one, accusing them of being instrumental in causing them to fall in. Had "Practical's" deeds enabled him to have thrown off his mask, some one might have seen him, and given timely notice that he was on the road to Sloughy Pond. He ("Practical") trusted too much to his boasted league with the most experienced practical miners in the world. Who are they? Where could they come from? Surely they are not Cornishmen in masks, labouring under fear to meet a single individual, who does not even reside in the county, though he gives them his name and residence, and all the acts of his life are before them. He, armed only with practical facts to aid theoretical views, challenges them to take up any particular mining subject, and endeavours to establish it as a law from practice and precedents, and even to meet them on the spot, when required to endeavour to authenticate one of Nature's great truths. What more can I say? Were I to fill a column with poetry and abuse, it would amount to nothing in the eyes of a thinking public. I only ask "Practical" where I ever lost even 100*l.* to any company?—and what I have profited is too well known to need comment. Neither am I "showing off," as he endeavoured to insinuate, for a situation, nor to make money by share jobbing; I am not particularly in want of either. When I take up a thing, I carry it out individually, and can most times give thinking and well-informed men a situation; but not such as "Practical," who cannot unmask. It is most singular that amongst the many applications I had last week for a situation, two are pointed out as from "Practical" and his friend.

Turning to my "theoretical views," they are as every other person's, either true or false; and I have a right to indulge in them, and to attempt to bear them out by practice and precedent. "Practical" and his friends should endeavour to do the same. This he never aims at. His letters generally are based on no foundation; his object appears only to attempt to degrade those who can come out with an open countenance in broad day. He appears to envy their situation. When we reflect for a moment, what more could be expected from a man whose acts through life will not allow him to pass through Redruth in open day? Is it to be wondered at that he has never seen the lode between there and the Indian Queen's?

With regard to my being placed in the Crystal Palace, I can only say that I should then think myself in an enviable situation. They cannot well place anything but a bust of some there. Were they to do so, certain disagreeable persons would know where to find them. I think this quite enough on this score, as I never would indulge in personalities without affixing my name. This "Practical" appears to do with every one. He having completely failed to confute one of my former remarks, I will not attempt again to make the round after him. If any schoolboy from a mining district could not bring forth sounder arguments on mining, he ought to be chastised.

I beg to tell him that his worthless remarks in future, without his name, will be unworthy of my notice; but, if he will come out manfully, I will put his first sneered-at remark to him as a starting point—as to the crust of the earth being made up in angular pieces, where he says I have only a vague authority for it; and he talked about pulling out the key-wedge, and the earth would dissolve. I asked him from what? Now, I put the question to him fairly as to the earth's crust being all in angular pieces; to prove which I beg him not to twist, but go straight to work. Let him get, or draw, a section from the cliff at St. Agnes south to the sea, showing all the end view of an east and west lode, and flookans or clay veins, with their declination, or underlay, as found near the surface, on a scale to a depth of five or even 10 miles; or he may take an east and west one, if he likes, showing the end of the north and south lode. The former may be the better known of the two. He may ask who is to pay the expense? I say it is not above two days' work for him. As I shall not carp at trifles, it matters not if half of the lodes are left out; then let him hand it before the public—let them then determine whether even his bust is worthy of a place in the Crystal Palace. This is the way to begin; one thing at a time. "Practical," and his most able colleague, who defy the world, being so well versed with the structure and component parts of the earth's crust, when assisted by this diagram, might solve the problem as to which is the key-wedge, and prevent the miner from meddling with it, to put an end to time. He would then be worthy of a Crystal Palace to himself, with a bolted door to keep out ugly customers.—N. ENNOR: *Wivelscombe, July* 2.

METEOROLOGY—OR HOW TO GET OUT OF A MESS.

SIR,—It being at all times gratifying to see that the seed we have planted is likely to prove fruitful, in reference to my letter which appeared in the Journal of the 24th of August, 1850, on "Evaporation not referable to 'Heat'—the hygrometer an imperfect instrument," I am induced to direct attention to an article by Capt. James, R.E., being one of a "new series of papers on subjects connected with the duties of the corps of Royal Engineers," published by Mr. Weale; and however much I may rejoice at the progress of truth, I cannot but lament the necessity of my having again to expose an unbecoming attempt to set aside the results of my labours—a task, on the present occasion, the more irksome from the relative position of the parties concerned, with whom it has ever been my anxious desire to act in concert, but who it is quite clear are determined on pursuing an opposite course.

Accompanying my letter, above referred to, will be found a statement showing the register of the wet and dry bulb hygrometer, its means deduced from the differences, total amount of evaporation during the same period, and the mean of temperature; and on the supposed principle that the difference in the temperature indicated by the dry and wet bulbs is referable to the amount of evaporation, which evaporation depends on the amount of vapour already in the atmosphere, I observe "in the differences then, and the amount of evaporation, there should, at least, be some concordance; but it will be observed that, on the 22d of July, with a difference only of 4·5° between the wet and dry bulbs, we had 210 grs. of evaporation; whilst on the 1st of August, and other days, with a difference of 5°, we have 90 grs.; on the 31st July a difference of 6° and 80 grs.; on the 6th August, 6 5° and 90 grs.; and on the 9th, with a difference of 7·5°, we have only 195 grs. of water evaporated—the temperature, be it observed, being in most cases much the same, although frequently travelling in an opposite direction to the evaporation."

Here, then, we have clear evidence that evaporation does not, under all conditions, produce the same amount of influence on the bulb of a thermometer, and we are likewise unmistakably informed, that a decrease of temperature in the atmosphere, or an approximation to the "dew point," when the vapour is "squeezed out," actually produces an increase of evaporation; and although, in my papers of 1847, I showed good reasons why Daniel's hygrometer must on principle be faulty in construction, until 1849 no proof to that effect was adduced, and the scientific world continued to enjoy their but partially disturbed slumber; but the thunder of your No. 783 pounder of the 24th August, appears to have roused them from their lethargy; for we are now informed, in this choice epistle from the Royal Engineers, that "*much difference of opinion existing amongst scientific men*, as to the accuracy of the indications of the dry and wet bulb hygrometers, for determining the temperature of the dew point, particularly in climates subject to the extremes of temperature and humidity, it is proposed to have direct observations upon the point made with Daniel's hygrometer at the following stations—viz.: Newfoundland, Toronto, Demerara, and the Cape," which are 4 of the 19 stations at which the ROYAL ENGINEER METEOROLOGICAL OBSERVATORIES are to be established.

About 20 years since, when I commenced my enquiries into the laws which govern the decomposition of matter, the first fruits of which will be found in No. 9 of "Atmospheric Influences,"* already in your possession, a certain number of *savans* formed themselves into a "British Association for the Advancement of Science," and on the recommendation of that body the Government established, at an enormous outlay of the public money, observatories in different parts of the globe, to discover something in reference to terrestrial magnetism and meteorology; one of the instruments used in those observatories, as well as at the Royal Observatory, Greenwich, being this said wet and dry bulb hygrometer. Does Sir John Burgoyne, under whose direction the "direct observations" are to be made, mean to imply that the Astronomer Royal, Colonel Sabine, R.A., who has the direction of these observatories, and all the rest of the scientific world, are such consummate fools, that they have continued, year after year, to use this hygrometer without testing it by "direct observations" with Daniel's hygrometer, and that it has been left for the corps of Royal Engineers to discover the necessity of such a check? This is the only interpretation that can be put upon such language; but Sir John Burgoyne must know as well as I do, that these hygrometers, have been tested over and over again, *both being based on the same principle*, and that until the publication of my papers, the wet and dry bulb hygrometer, assisted by Mr. Glaisher's very ingenious tables, was deemed perfection; but now the hygrometer can no longer be trusted. Upon what excuse, then, is it to be discontinued? It must not be on the showing of a clerk; so *Major-General* Sir John Burgoyne supersedes *Colonel* Sabine, for the purpose of condemning the wet bulbs, not on *actual evaporation*, but on Daniel's hygrometer, which, *although perfection*, is not applicable to ordinary purposes, in consequence of the large consumption of ether attendant on its use; and so we shall get out of the mess. Is THIS, then, one of the "duties of the corps of Royal Engineers?"

Another of the instruments to be used in the Royal Engineer meteorological observatories is the rain guage, the ordinary construction of which is that of a funnel; but by memorandum, dated 16th February, 1850, on the principle that the angle of incidence is equal to that of reflection, I pointed out to Sir John Burgoyne that, in proportion as the fall of the rain is diverted by wind from the perpendicular line, it must glance off the inner side of the funnel, and that very little would be collected at a less angle than 45°; and at the same time I suggested the use of a square vessel or box, which would obviously, under all ordinary cases, collect the same amount of rain; and the bottom of the box being made lower at one end, a tube connected therewith would convey the water to any part of the building; to which memorandum Sir John appended the following remark:—"I believe that the ordinary rain guage is an imperfect instrument, and that the site for it requires consideration; but this *idea* for an improvement is too indefinite to be of much use;" but whether my suggestion has been of use or not, it appears that "the receiver is merely a 10-inch *cubical box*, made of zinc, with a partition half way down in the form of an inverted pyramid, with a ½-inch pipe at the apex, through which the rain water descends. The object of the partition is to prevent loss by evaporation, by protecting, *as far as possible*, the water which has been collected from the action of the sun and wind." Of these rain guages two are to be supplied for each observatory, one is to be sunk into the ground, and "the other should be placed about 20 ft. above the ground, in some convenient position on a building, or on a pole put up for the purpose. It will be convenient in places to have a small tube of lead or gutta percha from the bottom of the upper receiver to the ground, to obviate the necessity and discomfort of getting up to the rain guage to measure the quantity collected;" *and dispenses with the object of the partition.*

Here, then, we have a fair sample of the value of these meteorological observations; the rain-guage, which is to be sunk into the ground during heavy rains, will obviously collect the splashings on the ground, at least of an inch on each of its four sides; and on the other hand, as the rain is to be measured only once in 24 hours, the sun acting on the upper surface of the metal partition, or *loose* false bottom, will raise the temperature of the air underneath sufficiently high to cause evaporation to proceed as fast as ordinary rain falls; no fall towards the tube is given in the high rain guage, and the description of the vessel into which the tube is to discharge is left out of the question altogether. When I suggested my square box, I contemplated that it should discharge into a vessel graduated so as to show the number of inches and 10ths that might fall on the bottom of the vessel, so that the amount of rain could be read off at any time; but this point appears to be deemed altogether immaterial.

We are also informed that the "daily observations of the other instruments are to be taken at 9½ A.M. and 3½ P.M. As these hours fall within the regular working hours of the officers, and of those who are employed in the offices, *all of whom* may be instructed accurately to read and register the instruments, it is expected that the observations at these hours will be made with great care and regularity." If, then, the officers should be absent, and others who are permitted to be scientific should not be present, the office of observer and registrar must devolve on the clerks or messengers; and it is not impossible that this observing and registering may induce in the clerk a *scientific turn of mind*, which in Sir John Burgoyne's own office may be deemed sufficient grounds to pronounce the possessor disqualified for the discharge of his clerical duties, and to be deserving, for that offence alone, of degradation.

That some plausible excuse must be got up, on which to discontinue Col. Sabine's corps of observers, whose work the Astronomer-Royal has declared to be useless, is self-evident; but, possibly, those who have to pay the piper, may consider the present farce rather beyond a joke. At all events, I think the result of the "direct observations" at the four stations named, including Demerara, *where ether will boil in the shade*, might have been determined, before incurring the expense of sending out a lot of instruments to other stations, which the ROYAL ENGINEERS may declare to be useless. FRANKLIN COXWORTHY,
Canterbury-place, Lambeth-road, June 30. Author of *Electrical Condition.*

WHEAL HAMLYN.

SIR,—The truth must prevail, and "honesty is the best policy." A few words from me now will, I am sure, induce you to put an end to the scurrility of your correspondent, who has attacked the character of persons interested in this mine. I admire the spirit of a man who can expose wrong, and would on any occasion join him in opposing schemes that showed a fraud on the public; but there is rather too much acrimony in your correspondent's tone to make any one believe that "virtuous indignation" ever prompts him to "rush into print." No, Sir, it is from no other desire than to damage the interests of *one* individual with whom he is at variance, that your correspondent has maliciously insinuated that evil reigns in the management of Wheal Hamlyn. Facts are stubborn things. Let your correspondent again understand that I am not conscious of any act in this or any other mining companies I manage but what will bear scrutiny; and, perhaps, some of my exertions may insure me credit. I have no personal acquaintance myself with your correspondent, and have attached my name to observations which I felt called upon to urge in explanation of the position of this mine, as secretary of the company. A few words more in explanation, and may I hope that you will, as an umpire, zealous to promote honourable mining enterprise, pass a final opinion on the course taken by our opponent, and upon my own statements and offers. In the first place, I would assure you that, individually, I am not to blame for having my name attached to prospectuses or particulars of this mine, in which only *one* actual blunder appears. The persons who held 1000 out of 1024 shares into which this mine was divided, in the middle of May last, arranged amongst themselves to unanimously appoint me as secretary at the meeting which immediately followed, and, therefore, inserted my name in the prospectus—or more correctly called particulars—which were issued by them as a private means of advertising their property in this mine; and why should mining shares in legitimate undertakings be not so advertised, as well as other capital stock? I assert that your correspondent, who shields himself behind the initials of "R. S.," is guilty of a false assertion, if he states that he knows of 100 of those papers having been circulated; and he further adds to his sin, if he asserts that he can name one shareholder, who is now holding shares in this company, who will say he has been victimised by misrepresentations. Every paper relating to Wheal Hamlyn is open to any respectable person at my office, if they feel interested in an examination of them; and in a few days the lease will be also in the hands of the shareholders.—HENRY PEET: *Threadneedle-street, July* 10.

THE GERMAN MINING COMPANY.

SIR,—The settlement of the affairs of this company under the Winding-up Act may now be said to be indefinitely postponed. About this time last year a very pleasing prospect lay before the contributories—*upon paper*. The mines were represented as highly valuable, and only required an inspection, and a report thereon, to have them bought up at once by some speculative *millionaire*. Well, the official manager was sent to Germany at the expense of the company, and he returned safe and sound from the seat of war, and made his report, which was to the effect, that one mine was filled and surrounded by water, and the other by war! So matters have remained ever since; and when, a few days ago, the Master made some inquiry as to their fate, the answer was the same—war and water, but no silver, lead, or *tin!* Well, it is not every day that even an Englishman can be found sufficiently bold to venture upon a pleasant autumnal trip up the Rhine, perhaps to get tripped up himself by an Austrian bullet, merely for the sake of looking at a deep hole in that abode of goblins, the Black Forest, with no better return for his risk and pains than to find it filled with dirty water; to say nothing of the difficulty of making oneself understood by a people who do not understand plain English.—NEMO: *London, July* 10.

ST. AGNES BEACON (tin and copper).—This mine, advantageously situate on the south side of that celebrated mountain, is held under the Duchy of Cornwall for 21 years, at 1-15th dues. The distance on the run of the lodes is full 500 fms., two of which have yielded tin of first-rate quality, and to a considerable amount. To prove the value the ancients held this property in, it was actually walled around for protection, as already recorded in our columns of 10th May last. It is close to a shipping port, and where labourers are plentiful. There have been extensive workings about the shallow levels, and a new shaft has been recently sunk. By driving on the run of the cross-course the whole of the lodes will be intersected at a very small outlay, and no steam-engine required. About 3000*l.* worth of work has been done for the advantage of further exploring. An additional outlay of 1000*l.* is estimated as sufficient to bring profitable results. That sum is now to be raised by the issue of 1000 additional shares. The concern is governed on the Cost-book Principle, and a committee of finance to be selected by the shareholders at the first meeting convened. A reference to practical miners upon the spot is solicited prior to parties applying for shares, a system which we should like to see more generally adopted.

TRENAULT LIME QUARRIES.—All the necessary arrangements are nearly complete, for carrying on these important works on a scale, not only commensurate with the requirements of the locality for agricultural and other purposes, but with a view of supplying the London and other markets with the valuable blue lias lime with which the quarries abound. Additional machinery has been ordered, and the existing gear, which is of itself considerable, and nearly new, is undergoing thorough examination preparatory to the commencement of operations on the part of the company. Four more kilns, moreover, are to be erected without delay. The share list is almost full, and a limit of the period for the reception of applications has, consequently, been announced.

* Will be found in another part of this day's Journal.

ROYAL SANTIAGO MINING COMPANY.

The annual general meeting of this company was held at the offices, Broad-street-buildings, City, on Wednesday, the 9th instant.

Mr. TAYLOR said, he felt diffident in taking the chair in the presence of the worthy alderman (Mr. Alderman Thompson, M.P.), but he had been requested to do so by Baron de Goldsmid, who had gone to deliver a despatch which he received that morning from the United States. Thinking it very important to the Mexican bondholders, he had gone to the office immediately, lest it should be considered that he held information earlier than others. As it was important to the baron to be there, they must look upon him only as the *locum tenens* of their worthy chairman. The report that would be read to the meeting would disappoint many of the proprietors, but it was the duty of the directors to place the position of the concern fully before them. After hearing that, they would see the state of the company, and he should be happy to answer any question arising out of it.—The SECRETARY then read the following:

DIRECTORS' REPORT.

This is the annual general meeting, at which the directors submit to the shareholders an account of the workings of the mines, the general state of the concern, and its financial position. The accounts upon the table, of which an abstract is annexed, show the expenditure in the half year ending 28th February last amounts to 19,547*l.* 17s. 6d. in wages, mining materials, timber from the United States, transport of the ores, &c. The quantity of ore extracted during the same period, according to the monthly reports, amounts to 912 tons from the Perseverancia mines and 20 tons of precipitate. Of this quantity 508 tons were brought to Swansea in the ships *Sion* and *Sunbeam*; but the ore was so largely impregnated with mundic as to be of lower produce of copper than the previous shipments had been, and netted only 19184. 5s. 9d. The 20 tons of precipitate realised (nett) 963*l.* 12s. 8d.

In the course of the half-year, a considerable extent of ground has been opened on the run of the main Perseverancia lode by shafts and levels; but its size and yield of copper ore have been fluctuating. A depth of 32 fms. below the adit has been reached; but, on extending the 32 fm. level, the water increased so rapidly as to stop the workings until more powerful machinery was put into operation, which has occasioned an outlay in the purchase of mules, and a temporary reduction of the raisings of ore in the months of March and April.

By the late letters from the manager, the necessary alterations in the machinery to keep the mine dry were completed; and the sinking of Thompson's shaft below the 32 fm. level had been advanced with vigour, in order to prove the lode in depth. While the alterations were in progress, the upper levels were extended west on the course of the lode, and successfully, as a good course of ore was discovered, giving promise of a continuance in length and depth, and yielding from 5 to 10 tons par fathom, and more free from mundic.

Mr. Hoskins having given notice of his intention to return to England at the expiration of his agreement, in February last, the directors have been required to appoint another person to direct the working of the mines, and selection and preparation of the ore for shipment; and they have the satisfaction of stating that they have engaged Mr. Treweek, who was formerly, and for several years, in the service of the company at the mines, and who, from his mining experience and acquaintance with the mineral deposits at Cobre, is well qualified to direct the operations of the company. In January last, the directors found it necessary to engage and send out 11 miners from Cornwall; and they are now doing good service in exploring the lodes and dressing the ores. On Mr. Treweek's arrival at the mines, he found about 438 tons of ore of this half-year's raisings; and as the directors had particularly drawn his attention to the great loss sustained on shipping ores of very low produce, he had the whole carefully re-dressed, and as much of the waste and mundic as possible extracted therefrom. His operation reduced the quantity to about 250 tons; but the quality has been greatly improved, and a saving effected in the heavy cost of transport from the mines to the port of shipment, and of freight home. This ore, together with 176 tons subsequently raised from the mine, makes the cargo of the *Sir Isaac Lyon Goldsmid*, now on her voyage to Swansea, and is taken into this half-year's account at the estimated nett proceeds of 2030*l.*, and which makes a total of receipts for that period of 5129*l.* 5s. 11d.

It will be satisfactory to the shareholders to learn that Mr. Treweek entertains a very favourable opinion of the Perseverancia and the adjoining pertenencias. The superficial appearances of the lode, and the gossan which it contains, he considers to indicate as fine a promise as any that he has seen at Cobre.

The directors think the time has now arrived when operations should be resumed in the St. Andrew Mine. The Sanctuary ground lode seems to be yielding large quantities of ore not many fathoms from the boundary of this mine; and by sinking the Victoria shaft in the St. Andrew pertenencia 20 to 30 fms. deeper, it is probable the lode which was cut off by a cross-course may be regained, and this opinion is borne out by present appearances. The directors have to state that in the opinion of the manager a steam-engine will be required for draining the Perseverancia group of mines of water; and if the steam machinery is removed to them from the St. Andrew, it would be expedient to substitute for it a more powerful engine on the latter mine. A considerable number of Cornish miners should also be speedily engaged and sent out. It is the opinion of the directors that it is for the interest of the shareholders that the works before referred to should be forthwith commenced, and prosecuted with vigour; but as the available capital of the company is inadequate for the purpose, it is necessary that a call should be made; they, therefore, intend to make a call of 2*l.* per share on the 7000 shares of the company, payable on or before the 15th Sept. next to Messrs. Glyn and Co., bankers, subject to the conditions stated in the certificate held by the proprietors—that is, of the forfeiture of such shares upon which the call is unpaid beyond 30 days after the day fixed for the payment. The form to make the payment will be delivered upon application to the office of the company. In conformity with the regulations of the company, one director (Ald. Thompson, M.P.) retires at this period by rotation, and the directors recommend him for re-election; and Edmund Jerningham, Esq., one of your auditors, also retires, whom they propose for re-election.

Mr. TAYLOR, in moving the adoption of the report and accounts, stated that they were aware that, for several years past, their efforts had been devoted to two points—one, the mine suspended 12 months since, called Trevince, and the other a group of mines, called Perseverancia. This latter had fluctuated very much—at one time presenting bunches of very rich ore, and at others it yielded little towards the current expenses of the undertaking. About the period of the last meeting considerable dissatisfaction was expressed at the low quality of some of those that reached home. It would no doubt be satisfactory for them to know that before Mr. Treweek left England he had been charged to select the ore very carefully, the consequence of which was that on his arrival he had extracted a large quantity of waste as valueless, or not worth the expense of bringing over, but what had been selected would be the more profitable. He thought the group of Perseverancia lodes were of considerable promise, in which he was supported by the opinion of Mr. Hoskins. He would tell them on what he grounded his opinion. (Hear, hear.) The lodes of the new mines would be parallel, north and south, with the champion lodes of the Cobre Company. In the neighbourhood of this new mine was the cross-course between themselves and the Cobre Company, to which he looked for their future success. At all events, they had now a favourable field before them, and he should highly recommend its being tried. Mr. Treweek proposed to place a new engine on this mine, which would, of course, require a considerable sum of money. There were two mines which the company held at present—one La Paz, and the other St. Andrew, which latter was the one they wished to try, and which the Cobre Company's workings had nearly approached. (Hear, hear.) It was, therefore, advisable for them to sink the shaft deeper, to reach, if possible, that rich vein, and to see if it continued its shoot in length into the property of the Santiago Company. It would be necessary to do that to the extent of 20 or 40 fms., and, perhaps, to provide a steam-engine of 50 or 60-in. cylinder, which would, no doubt, afford them the means of realising considerable profit. They would have at the end of August 8000*l.* available funds, and as this was a scrip company, the shareholders of which could not easily be found, the money should be provided before that expenditure was entered upon; indeed, it would be required by the directors, who were much more interested than himself.

A PROPRIETOR asked if that 8000*l.* included the new arrival?—Mr. TAYLOR replied in the affirmative.

Sir CLAUDE SCOTT, Bart., said they had 8000*l.* in hand, and called for 2*l.* by September. He did not see how they required that amount for a mere trial; it seemed to him quite unnecessary to call for 14,000*l.* He wished to know how much was required to ascertain whether this lode went in the right direction, or extended to the ground of the St. Jago Company; probably it might be there, and if so could be ascertained for a less amount.

Mr. TAYLOR said that to reach the lode they would have to spend probably 6000*l.*, and the new engine would cost 4000*l.*

Mr. Alderman THOMPSON, M.P.: The question you have to consider, for this is a mining speculation after all, is whether the probabilities which are placed before you are worth advancing further capital. Mr. Taylor has clearly explained how the Cobre Company are within a very short distance of the boundary of the Saint Andrew Mine, and how probable it is that a lode in that situation may be found to extend to our boundary. From the information we have received, we have no reason to doubt but these probabilities are in favour of our sinking the Saint Andrew Mine, but we cannot do this without the assistance of an engine. If we find the Cobre lode there, I have no doubt that in a very short time you will be repaid your 2*l.*, which it is now proposed to call. (Hear, hear.) It, therefore, becomes a matter for your consideration whether the probabilities are of such a character that in your estimation it will be a prudent speculation to advance this 2*l.* per share. You see by the accounts that our financial position is such that it is quite impossible for us to lay out any more money; unless you furnish us with that money, the alternative will be that we must close the concern in August next. We have but 8000*l.* left, and we are going on losing 1000*l.* or 1500*l.* a month. I have no hesitation in stating that the chances appear much in our favour, and that it is worth our while to advance this 2*l.*, to see if we cannot redeem ourselves; it is the only chance we have, and seems to me to be a fair and promising one. When we find our neighbours within a few fathoms of our property, it would be almost an act of *felo de se* to withhold this 2*l.* a share. (Hear, hear.) I can promise you that we shall make no further call, as we think that sum will effectually try this lode, and that rather than call upon you for any further money we would abandon the concern. I am happy to second the motion that the report be received and adopted.

Some conversation took place as to making the call in two payments.

The Baron de GOLDSMID, having now taken the chair, said they had not asked for a larger sum than they thought necessary; but he would dissent from going so far as his hon. colleague (the Alderman) in not calling up more than 2*l.* per share. They had all heads on their shoulders, and could judge for themselves if any more was wanted, and if it was expedient to call for more. They had confided in the directors hitherto; and if they thought it right to continue that confidence, they would vote this 2*l.* a share. The directors would not spend the money improperly. They would rather have it in one payment than the extra trouble and delay of making a second call, when, perhaps, the money might be profitably employed. (Hear.) It was not safe to go into this new speculation without they had got money in hand. (Hear.) He had on various occasions told them that mining was only another word for uncertainty, and he told them so still; but there was now a fair prospect before them, which, he thought, should not be lost. They had the advantages of the opinion of a clever miner (Mr. Taylor), whose reputation was acknowledged, as well as that of Mr. Ald. Thompson. He could assure the meeting that the directors would not go into this new undertaking except they thought it would turn out successful. (Hear.)

Mr. LEE asked if they would forfeit the shares?—The Baron de GOLDSMID said they might do it; but it was very unpleasant to the directors to act so with gentlemen who had been long connected with them.

The report was then adopted unanimously.

Mr. Ald. Thompson, M.P., was re-elected a director, and Mr. Jerningham an auditor.

Mr. LOUSADA thought they were indebted to the directors for the candid way in which they had come forward on this occasion. (Hear.) He believed that they were sincere in their statements about this new mine, and he hoped all their expectations would be realised. With these observations, he would move a vote of thanks to the chairman and directors of the company.

Mr. SMITHWICK seconded the motion, which was passed unanimously, and the meeting separated.

MINING COMPANY OF IRELAND.

The half-yearly assembly of proprietors was held at the office, Lower Ormond-quay, on Thursday, the 3d inst.

EDWARD ATKINSON, Esq., in the chair.

Mr. RICHARD PURDY ALLEN (the secretary) read the advertisement convening the meeting, also the following report and an abstract of accounts:—

Your directors cannot approach the immediate subject of their report without adverting to the great and irreparable loss which this company has sustained since your last assembly, by the decease of your late respected and lamented secretary.

Mr. Purdy was the originator of this association; his energy, ability, and sound discretion carried it triumphantly through all the difficulties with which its first operations were beset, and fostered it into prosperity and success, and when in those vicissitudes to which mining property is especially exposed it was visited by adversity, his calm but resolute judgment inspired courage, perseverance, and hope. For 27 years he discharged the important and anxious duties of his office with a courtesy and discretion which attracted the regard and good-will of the public, and with a fidelity and devotedness which entitled him to the confidence and gratitude of this company

The directors, desirous at once to mark their respect for Mr. Purdy's memory, and to do an act of justice to a faithful officer of the company, have appointed to the vacant office his nephew, Mr. Richard Purdy Allen, who has been for 23 years in their employment, immediately under Mr. Purdy, and they entertain a confident hope that in the discharge of his duties he will endeavour to imitate the example of his excellent uncle.

In reporting the result of the operations of the last half-year, your directors regret that they have not on the whole fully realised their expectations, but the improvement apparent in some of the most important of your mines encourages them to anticipate more satisfactory results from your future workings.

SLIEVARDAGH COLLIERIES, COUNTY TIPPERARY.—The exertions of your board have been continued with the view of realising the old stock of culm at the collieries, upwards of 4000 tons of which have been sold in the past six months, and the present account shows a reduction on the entire stock of nearly 11,000 tons within the last year. Your directors, therefore, trust from the improved feeling in the country generally, and the practical removal of causes which heretofore fettered our mining exertions, that increased sales will enable them to present a more satisfactory report at the next general meeting.

LISNACON COLLIERY, COUNTY CORK.—The level to unwater the Lisnacon Colliery is nearly completed, and the seam of coal, about 2 feet thick, has been explored to some extent. Your board is, therefore, in a position to take advantage of any improvement in the demand which may arise.

KNOCKMAHON COPPER MINES, COUNTY WATERFORD.—The continued liberality of the Ecclesiastical Commissioners has induced your board within the past half-year to expend a considerable sum in exploring the lower part of the Stage Mine and the Tankardstown lode, which runs into their property, which, together with the cost of sinking the new shaft at the north mine and erecting the Kilduncane engine thereon, in order to work the very promising lode discovered, as mentioned in the last report, has occasioned a further outlay in those mines; but as the great expense from the latter cause will cease after the present month, and as the prospects there are favourable, and the appearance of the other parts of the mines, and at Tankardstown, satisfactory, your board feel confident in the ultimate result of the present operations.

KILMURRIN COPPER MINES, COUNTY WATERFORD.—The searches at Kilmurrin are still in progress, and the appearances are favourable.

LUGANURE LEAD MINES, COUNTY WICKLOW.—The stamping mill erected at the Luganure Mines, as noticed in your board's last report, having given a very satisfactory return for the expenditure thereon, additional stamps have been ordered, and will be completed in a few days. The mines also have been considerably extended by driving on the lodes and at the deep adit level, driving for several years, it is expected to cut the great lode shortly, from which the present returns are chiefly being realised. Altogether, the present prospects of those mines have confirmed the favourable opinion expressed in the last report, and your board indulge the hope that the returns from henceforth will be increased.

Your directors, availing themselves of the alteration of the law with respect to the leasing of mines by tenants for life, trust property, &c., as noticed in the report presented 6th July, 1848, have completed with his Grace the Archbishop of Dublin (to whom the company is greatly indebted for his encouragement and support on every occasion) arrangements for a new lease of those mines for 41 years, at the same commuted rent as before, without the penal clause as required by the previous law. This new lease, which has been prepared under the sanction of his Grace, and only waits his return from England to be signed, gives your board great confidence in the further operations in this extensive district.

BALYCORUS LEAD WORKS, COUNTY DUBLIN.—Your lead works at Balycorus have realised a satisfactory profit, regard being had to the very limited operations within the past half-year; but your board trust that increased returns from your lead mines will ensure a corresponding increase from henceforth at these works.

With respect to the charge on Lord Audley's estate, your board expected to have been able on this occasion to state the period when the property is likely to be sold. Some delay has, however, arisen with regard to an outstanding lease of the mines, but the directors trust this difficulty will speedily be removed, and the amount of the company's claim realised.

The above debt, now amounting to 14,578*l.* 10s. 11d., with other good debts, bills, cash, and mining materials not in use, 11,613*l.* 6s. 1d., and mineral produce 22,975*l.* 1s., amounting in all to 49,148*l.* 18s., form the available assets of the company, in addition to the mines, machinery, mill sites, and farms at cost, 111,389*l.* 4s. 6d.; and the liabilities amount to 17,251*l.* 0s. 9d., as set forth in detail in the abstract of accounts, presented herewith, duly audited.

The company's profit was 422*l.* 1s. 6d., exclusive of 1752*l.* 14s. 6d. expended in prospective searches for future advantage.

The CHAIRMAN observed that the report had been framed in the fullest manner possible, so as to convey to the proprietary the present state of the different interests, and the prospects connected with them; it would be therefore unnecessary for him to enter into the details; however, it was very agreeable to him to remark, and indeed it was the combined opinion of the directors, that every interest exhibited an improvement; and he had no hesitation in saying that in a short time they would be in a much more favourable and prosperous condition. (Hear, hear.)

Mr. BARTON inquired if the agent or engineer of the Knockmahon Mine was present?—The CHAIRMAN replied in the negative.

Mr. BARTON said he merely wanted to know whether there was a probability of much more money being expended on that mine during the next six months.—The CHAIRMAN said the report, he thought, stated that the expenditure would very soon cease, and it was even less than the amount estimated for sinking the shaft, which has been in operation since December last.

A brief discussion then ensued, as to the propriety of having a report from the agent appended to the usual half-yearly report, and the matter was ultimately left to the discretion of the directory.

Mr. JAMES PERRY moved the adoption of the report.—Mr. CHAYTOR seconded the motion, and it was unanimously agreed to.

John Ennis, Henry Pim, and W. H. Pim, Esqrs, were elected auditors for the ensuing year, after which the meeting separated.

NORTH BULLER MINING COMPANY.

A general meeting of adventurers was held at the offices, Threadneedle-street, on Tuesday, the 8th inst.

THOMAS KING, Esq., in the chair.

After the usual preliminaries, the SECRETARY read a statement of the accounts, showing—Balance last account and call received, 1052*l.* 14s. 2d.; expended during the quarter, 966*l.* 16s. 2d.: leaving a balance in hand of 85*l.* 18s.

The CHAIRMAN then read Capt. Mine's report, which had just been received from the mine:—

July 4.—Since we recommenced sinking King's shaft the men have sunk about 2 fms., which is now down from surface 25 fms. 4 ft.; the lode in the shaft is 3 ft. wide, with spots of yellow copper ore, intermixed with prian, peach, gossan, &c., underlaying north about 1 ft. in a fathom, in a pretty stratum of killas; indeed, we think from the present appearance of this lode, as stated in our former reports, there is no doubt of its proving productive in depth. The ground in Louisa engine-shaft is much the same as when we wrote last—still in a highly-mineralised stratum of felvan; the miners call it granite, it has every appearance of it, and we have no doubt we are getting near it; the men have not sunk much since setting day, in consequence of having the shaft to case down, ladders to fix, &c. In driving the adit end, we are happy to inform you the lode is still improving; it is now 3 ft. 6 in. wide, producing rich stones of copper ore, a more promising lode, so shallow, we do not recollect seeing, and there is no doubt in our opinion but that North Buller will be a rich and lasting mine, especially when we look at the locality and the number of lodes already discovered, all running parallel between the same cross-courses, and within a short distance of the celebrated West Buller Mine.

The CHAIRMAN said he had but few observations to make. The prospects of the mine were of a most favourable character; they were down 36 fms. in the engine-shaft, and he hoped they should before the next meeting cut the lodes in the 40 fm. level. Since the last meeting the horizontal flat rods were completed up to King's shaft, and they were now sinking on the course of the lode, from which rich stones of copper ore were being brought to surface, and he had every confidence in the future prospects of the mine.

The report and accounts were received and adopted, and a call of 1*l.* per share was made.

A vote of thanks was passed to the chairman, and the meeting separated, highly pleased with their future prospects.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode in Field's engine-shaft, sinking under the 80, is being mixed with more spar than for some time past, which we are not sorry to see. The lode in the end of the 80, east of the shaft, is 6 ft. wide, all good saving work for copper ore, worth 70*l.* per fm., and the appearance on the improve. The winze under the 80 is not yet drained for sinking. The lode in No. 3 winze, east of the shaft, sinking under the 70, is worth for copper ore 120*l.* per fm.—this winze is sunk 5 fms. under the 70. The lode in the 70 east is quite as good as last reported—viz.: 70*l.* per fm.; this level is driven near the west end of Wyld's shaft, and from 1 to 2 fms. south of the shaft. No other change worthy of notice.

BLACK BURN (ALSTON, CUMBERLAND).—In the low level the beds continue dipping nearly 6 inches in the fathom. There is no alteration in the appearance of the lime, of which there is now 5 ft. 6 in. in the forehead. At Scarberry level they have cut through a mass of plates, hazels, and limes, all thrown together, with a strong feeder of water in the forehead; it is now firmer with the 4 fm. lime in the sole.

BRYN-ARIAN.—The lode in the 20 fm. level, west of the engine-shaft, is 7 ft. wide, with a mixture of ore throughout; though of a course quality, we save the whole for dressing. The lode in the 20 fm. level, driving west from the winze, is 5 ft. wide, yielding about 15 cwts. of ore per fm.; the stopes in the back of this level, west of shaft, appear to be in good orey ground, and will produce at present 15 cwts. of ore per fathom. We have suspended driving the 10 fm. level west, in consequence of the air being so bad, but shall resume its driving again as soon as we get a communication from the level below; the stopes in the back of this level are producing 8 cwts. of ore per fm. The lode in the 20 fm. level, south of Hallett's, has become more settled since last reported, now 4 ft. wide, 1 ft. of which is good saving work; the lode in the end driving north from the shaft is 5 ft. wide, composed principally of black-jack, mixed with soft spar and lead ore; we expect shortly an improvement in this end, as we are nearly under the run of ore ground gone down from the level above. The water here has become very powerful, and appears to be draining all the old men's workings to the north of the shaft.

BRYNTAIL.—The 15 fm. level, going eastward, continues in good ore; the stope west will yield from 3 to 4 tons of ore per fm. The stope in the 5 fm. level is without alteration; the stope east of Hill's rise will produce 4 tons of ore per fathom; the cross-cut, east of Hill's rise, will produce about 15 cwts. per fathom. No. 1 cross-cut, going eastward, will yield 1 ton of ore per fathom. In taking down the south part of the lode in No. 2 cross-cut, about 4 fms. east of Geil's winze, we have met with some large branches of ore; but I cannot put an estimate upon it yet. The crusher is now erected, and will be at work, I expect, to-morrow. The engine-shaft will be down to the adit level in six weeks, should nothing occur to prevent the men working.

BUTTERDON.—The engine-shaft is sunk 7 fathoms under the 30; it would have been deeper had not the men been hindered by bad air, which we have now remedied by applying air pipes to communicate with the stack. The lode in the south end is rather disordered at present, but in the past week we have drawn some tolerably good work from thence. In the north end the lode is still large and encouraging.

CARTHEW CONSOLS.—We have now commenced driving north and south in the 95 fm. level from the bottom of the engine-shaft; the ground here, though somewhat harder than in the level above, is decidedly of a much better and more settled character. We have taken down but very little of the lode yet, but its appearances, so far as we have seen, are very good. The lode in the 85 fm. level north continues to show well, and the ground about it is very easy. The lode in the west end, in the 75 fm. level, has not at any time shown so well as it does at present, and the ore (copper) appears to be getting more massive; this end is now extended about 13 fathoms west, and in about 2 fms. further driving we expect to intersect another north and south lode, which runs parallel to the old lode; to the junction of these lodes we look forward with great and good anticipations. The south end in the 75 fm. level has continued to improve the last week, and that taken down yesterday (July 4) was very good work. In the 65 fm. level end south the lode continues very large, and producing some very good work in lead. The tribute department changes its appearance but very trifling; upon the whole, it may be reported as somewhat improved.

CARVANNAL.—This mine continues to excite considerable interest in its immediate neighbourhood, being adjoining to, and on lodes parallel with, Tresavean and Penstruthal, from whence immense profits have been realised; among other recent discoveries, we have in a winze sinking under the 46 fm. level, a course of black and grey ore, worth 100*l.* per fm. The mine has been inspected by at least a dozen agents from adjoining setts, all of whom are of opinion that it will become one of the richest in Cornwall.

CHYPRASE CONSOLS.—The following letter has been addressed by Mr. W. C. Morgan to the committee, dated St. Enoder, July 5:—Having been about a month in superintendance of our mine, it is natural I should make some inquiry and investigation as I go on in relation to the former workings upon it, and I am persuaded you will think with me, on a review of past operations, exhibiting most favourable results, that we possess the strongest assurance and guarantee for the success of our present undertaking. As long back as 59 years, that part of our mine forming "Lord Falmouth's sett," formerly called "Berthy Row Mine," was, I am assured by a credible witness, an old and respectable inhabitant of the parish, worked by a few miners with a most profitable result, they sunk a shaft to the depth of only 12 fathoms, with merely the aid of a small water-wheel, and after raising a considerable quantity of excellent tin from a rich lode in that shallow level, they were obliged to stop working, because their machinery was insufficient to fork out the water, although they believed there was an abundance of mineral still remaining in the ground. Many tinners appear also to have realised considerable sums from time to time by streaming or washing; amongst others I have seen one inhabitant of this neighbourhood, who obtained upwards of 800*l.* by washing tin that he had found on the surface. Now, all this is very encouraging to me; for it is a well-known fact that where tin is found on the surface the soil is also favourable, the miner is certain of finding the lodes abounding in greater quantity and richness of ore as he descends, and this is borne out by our experience on our own mine; and it was, no doubt, a knowledge of this fact that emboldened Captain Michell, in his letter to Mr. Geach, to say that he "believed our mine would prove as valuable as any in either Devon or Cornwall, and that it was absurdly knocked up in 1845." As regards another part of our mine, immediately contiguous to the former—"N. F. Basset's sett," formerly named Wheal Basset and Chyprase—this too has proved itself equally rich, if not richer, in mineral than Berthy Row. It was worked in a small number of shares (118) of trifling amount (I believe 4*l.*) about six years since; and, notwithstanding the disadvantage of so limited a capital, and small and insufficient machinery, that company received dividends of between 16*l.* and 17*l.* per share within one year and ten months, and continued to raise tin of the best quality and in considerable quantities, to the last moment of their working; but it appears, the air in the mine becoming exceedingly foul, it required another shaft to be sunk, and also a more powerful engine than the one they had (a 26-in. cylinder), which, of course, involved considerable outlay: these difficulties, together with a want of agreement amongst themselves, caused this productive and dividend-paying mine, as Capt. Michell justly says, to be "suddenly and absurdly knocked up;" and there are the best grounds for belief that had the late company only set apart a portion of the produce for the purchase of machinery to work the mine and bring out its resources, instead of dividing the whole amongst themselves, the Chyprase Mine would not only have continued in their hands to the present time, but would have paid them handsome dividends for the last five or six years. In taking this review of the history of their proceedings in connection with the Chyprase Mine, and regarding also the number of known lodes, the excellent quality of the tin, the shallow depth of the former shafts and levels, the appearance of the strata, and very great extent of ground remaining to be worked, I am fully and thoroughly convinced that we have the best prospects of success, and that the Chyprase Mine will, upon a fair chance being given to it by a moderate expenditure of capital, prove itself a most valuable one.—P.S. The engine-house is now finished, and the cylinder, main beam, boiler-condensing apparatus, and some other parts of the engine, are on the mine, and there is every probability of its being at work by the end of this month.

DEVON AND COURTENAY.—Since my last report we have changed our pitwork, and the sumpmen are now sinking without a lift, which I hope we shall be able to do for some time. The rise in the 60 is in disordered ground, which is favourable for rising, and producing good stones of ore. I am in hopes we shall hole to the winze in the 40 fm. level this week, which will enable us to set one or two pitches in the back of the 60 at a low tribute—say 3s. to 3s. 6d. The winze is also in the same disordered ground, but still there is a good branch of ore in it 6 in. wide. We have communicated Carthew's shaft to the adit level. The ground in the gossan shaft is harder than it was. The masons have commenced the masonry for the wheel-pit, and hope to finish it soon.

DEVON CONSOLS NORTH.—Morris's shaft, on the north lode, continues the same as last week, and the adit level driving towards it still improves. We find the south lode divided into two branches by a horse of killas, the northern part of which is composed of gossan, spar, and mundic, of the most kindly appearance. We also have to report that a very fine lode has been discovered in the northern ground of the Great Devon Consols, immediately adjoining our setts, which is believed to be the continuation of our south lode, thus affording us increased confidence in the ground we are exploring.

EAST BALLESWIDDEN.—The lode in the engine-shaft is just the same as last reported; it is also saving work for the stamps. This shaft is going down a little to the west, where the north lode crossed the Rose lode; and I believe, when our engine-shaft is down 10 fms., there will be a good prospect to drive east, where we shall have the intersections of different lodes going east under the old workings. The engine-shaft on the flat lode is nearly completed to the adit level. The new shaft on this lode is down to the adit level, near the crossing of the new lode; we shall now cut the shaft plat, and that will enable us to drive north and south on the new lode, and west on the flat lode. We shall erect our new horse-whim in the course of next week.

EAST BIRCH TOR.—I have this day (July 5) been underground, and have broken some capital stones of tin from the lode in the adit, and I find that the backs are also producing good stamps work. We have about 300 sacks of tinstuff fit for stamping, risen by the men on tutwork in driving and stoping. The tributers have also about 100 sacks of work on surface. There is no material alteration in our tribute department. I would recommend the proposed new engine-shaft to be sunk very shortly. There is a fine course of tin going down, and the water is rather quick; it will, therefore, be necessary for our line of rods to be moved and properly fixed, that the men may sink and drive without difficulty.

EAST CROWNDALE.—In the 47 east the lode is small, producing a little copper ore, but not worth saving. We have cleared up the sink in the bottom, and find a good branch of copper, but the water is too quick to sink by tackle. The men are put in the 58 driving east. The lode has improved, and is now 20 inches wide, 10 inches of which on the south part is composed of solid mundic and copper.

EAST SHARP TOR.—Hitchins's engine-shaft is now 37 fms. below the surface, the ground in which is without any material alteration since last reported on.

EAST WHEAL LEISURE.—The lode in the 27 east is large and kindly, with a leader on the south part that will turn out upwards of a ton of good ore per fm. The 17 west is also turning out good saving work. Taylor's lode, in the 10 west, is looking a little better; it is 2 ft. wide, composed of jack and ore. There are seven tribute pitches working, all looking tolerably well. A lode, 2 to 3 ft. wide, has been cut by cleaning at East St. George.

EAST WHEAL RASHLEIGH.—Since last report we have cut an east and west lode in the adit, composed of peach, prian, gossan, and spots of ore. The lode in the shaft continues favourable; we have taken up some good stones of lead from it (which I have forwarded to the office). Showing such promising indications at the present shallow depth, I feel sanguine of profitable results at deeper levels.

EAST WHEAL RUSSELL.—Since the last report, we have been driving east and south, to take up all the water from our top lift. We hope shortly to have all our new pitwork completed; the lode in the east and south ends is producing the same, equally promising—gossan, prian, quartz, and peach, and so in Murchison's shaft. We have commenced driving the adit level to Murchison's shaft, which we cannot get on with, however, for want of sufficient quantity of air. Our engine-house will be open in time for the engine.

ESGAIR LLEE.—The caunter lode in the deep adit, east of Morgan's winze, is large and spotted with ore, but not sufficient to set a value on. The caunter lode in the winze between the 12 is about 4 ft. wide, looking a little more promising, and producing some saving work, but not sufficient to set a value on. The stopes on the whole are not looking quite so well as when last reported, but yielding on an average about 6 cwts. of ore per fm. We have been much disappointed by Mr. John Williams, Aberystwith, in not receiving the few castings to be attached to our crushing-wheel, for pumping the water from the engine-shaft; he received the drawings, and the order to cast the crank, &c., on the 10th May, and promised to execute the same in the course of the following week; the same promise was repeated until Thursday, the 1st of July, when we were obliged to remove the order to Mr. John Ellis, who is to finish them to-day (July 7).

GEORGE AND CHARLOTTE.—The south lode in the shallow level, driving east, has scarcely any alteration since last report, still retaining its kindly appearance. The north lode, in this level, is also without much alteration, being still large, producing stones of ore The lode in the middle level, driving east, is at present small, but I believe we may fairly calculate on its improving as we approach the cross-course where the ore was found in the upper level. A new shaft was let to sink on the 4th instant on the top of the hill to the east of the present, workings intended to command the north and south lodes, they being at surface about 40 fms. apart, underlying towards each other, and from their present indications will, in all probability, intersect each other at about 30 fms. deep. At William and Mary side of the hill the lode in the whim-shaft is still large, producing good stones of ore. Good stones of ore are also being broken from this lode in the rise above the deep level, against the whim-shaft. There appears to be about 4 fms. of ground standing between these two points.

GREAT WHEAL BADDERN.—The 51, east of Tweedale's shaft, is rather less productive this week. The ground is a little harder, but the appearance of the lode is very encouraging. The stopes in the back are as usual, productive and looking well, both east and west. The 40 has improved; the stopes in the back and west of Buckley's are producing fairly, and the ground is favourable. The 30 end is unproductive at present, and the ground is hard. We expect an improvement at this point shortly; the stopes east of Burgan's are yielding well; also those at Buckley's are good. The 20 end continues remarkably fair; the stopes east and west are as usual turning out fairly. The cross-cut in this level, to cut the new lode south, is still in hand, and hope to be able to intersect it this month. The adit end is looking better; the lode has shown some rich lead. The tribute pitches are looking well. The surface and dressing operations have been much retarded through the Whitsuntide and Midsummer holidays; otherwise our sampling for this month would have been about one-fifth more than usual. We hope still, by working the pare early and late, to augment our sampling considerably. We have a pitch working on tribute at Wheal Vain for black jack; the tributers have 15s. in 1l. They are to pay all costs of every description; and unless the ore be sold they have no claim upon the mine; but they have a rapid market of their own for the ore, at 21s. 6d. per ton. We are progressing steadily in every department, and the general features appear prosperous.

HELVELLIN (WESTMORELAND).—In the old level the vein continues a good width, intermixed with cauk, veinstone, and a little ore. In the low level the forehead is harder, and the north cheek, by which we are driving, appears firmer. Where these harder beds set in, we find mundic and small particles of ore. The other mineral appearances are the same as last month.

HENNOCK.—I am sorry to say the top water for the engine is falling short, and is preventing us from sinking the engine-shaft. The shaftmen are driving east in the 20 fm. level, where they have a good lode, far superior to anything that has ever been seen in Hennock. I am making some arrangements for the water to come on to us regular, and I hope we shall succeed, when we shall be able to resume our operations again at the 30 fathom level.

HOLMBUSH.—The ground in Hitchins's engine-shaft, sinking below the 132 fm. level, is more favourable at present than it has been for the last 10 fms. sinking; the lode in the 132 fm. level south is 3½ ft. wide, composed of soft quartz, prian, flookan, and fine stones of lead ore—more productive than we have seen it before; since its intersection in this level, the stopes in the back will produce 2½ tons of copper ore per fm.; it appears to be dwindling in size as we approach the point where the lode is split, which is not to be wondered at, as the branch is only 3 in. wide at the point of horse (or where it is split); the stopes in the bottom of the level eastward will produce 2 tons of ore per fm.; the lode in the 132, west of the diagonal shaft, on the north part, will produce 2 tons of ore per fm.; we have about 14 fms. further to drive to reach the great cross-course, and as we near it the more productive we find the lode; the lode in the rise behind the last-mentioned end is 14 inches wide, producing stones of copper ore of good quality. The lode in the winze sinking below the 120, on the north part, to hole to the rise over the 132, is 12 inches wide, composed of mundic, spar, and stones of copper ore. We hope this month will go a good way towards effecting a communication, after which these two pares of men will immediately resume the sinking of the winze below the 132 fm. level, on the course of the lode, which we could not carry on at one and the same time with the end and rise, for want of air; we shall sink it with nine men when the rise is holed to the 147 fm. level, and then push on westward to unwater the 132 fm. level, and if we have sufficient air to extend a cross-cut south towards Hitchins's shaft. The flap-jack lode in the 120 fm. level, east of the great cross-course, is 2½ ft. wide, composed of spar, mundic, blende, and stones of copper ore. The lode in the 110, east of the same cross-course, will produce 1 ton of ore per fathom. We are sorry to say that these levels have not yet turned out to our expectations: we have to extend the latter level about 4 fms. more to get under the winze sunk below the 100; when reached, we shall rise and hole to it. The lode in the 100 east is 20 inches wide, producing 1½ ton of ore per fm.; we set a pitch behind this end at 6s. 8d. in 1l., but were obliged to abandon it after one month's working, in consequence of the great influx of water we had to contend with, and this ground cannot be made available until drained by the 110 fm. level. The flap-jack lode in the 100, west of Wall's, is 4 feet wide, composed of a great quantity of mundic, spar, and 1 ton of copper ore per fm.; the ground in Wall's engine-shaft, sinking below the 100, is without alteration from last week's report—set again to sink by nine men, at 40l. per fathom: we think, on the whole, the monthly sinking has been very satisfactory. We shall sample a parcel of lead ores next Tuesday, the 15th inst., computed 30 tons.

KIRKCUDBRIGHTSHIRE.—The lode in the 40, west of Gilpin's, is very large, with a branch of lead on the north wall, yielding 5 cwts. of ore to the fm. The 50 west is 4½ ft. wide, yielding 6 cwts. of lead to the fm. The ground is hard in the rise, and the lode unproductive. In the 74 west the lode is large, with spots of ore; in the same level east it is much as before. West of Stewart's it is 5 ft. wide, with good stones of ore, yielding 6 cwts. of lead per fm. We have sent off another cargo of lead this week, about 40 tons.

LYDFORD CONSOLS.—At Wheal Mary, the lode in the gossan shaft is large and kindly, being composed of spar, prian, capel, with spots of lead and mundic. At Wheal Adventure, the lode in the adit end, south of the engine-shaft, is small, composed of flookan, with occasionally spots of lead and mundic.

LLWYNMALEES.—The crushing-mill is not capable of reducing the refuse into a sufficiently fine state for separating the ore from the waste; consequently, the returns appear at present so much less than my estimate. I have ordered a 6-head stamps, which will be fixed immediately. I stated, on the 1st of June, the lode in the 14 west to be worth 60l. per fm. I still believe this to be as near the truth as possible; but as we are driving on one side of the lode only, the best part remains standing, which we shall take down next week. The mine is, in other respects, as last week; the pool is full of water. You will receive the tenders for the ore sampled on the 15th.

MERLLYN.—The lode in the whim-shaft below the 26 fm. level is worth 25l. per fm.; the lode in the winze east of the shaft is worth 18l. per fm.; the lode in the 26 fm. level, west of whim-shaft, is small and poor. The lode in the 16 fm. level, west of whim-shaft, is worth 20l. per fm. The lode in the winze sinking below the 15 yard level is worth 20l. per fm.; I expect this winze will be communicated with the cross-cut from the engine-shaft by the end of this week. The engine-shaft is down 4 fms. 3 ft. below the 16. The ground is still favourable for sinking, and a very congenial stratum.

MILWR MINES.—Since the last report the lift, then dropped to the 180 yard level, has been found to rest on a choke or sollar in the shaft, which has been got through with some difficulty, and the lift again let down 3 fms. below the 180. We expect to have another drop, the shaft being clear, so as to unwater the bottom level in the course of the ensuing week. The Milwr engine-shaft has been forked, and kept by the working of Herward engine, so as to render the former unnecessary. The great object has been to drain the Herward engine-shaft, and, consequently, no pitches have been set under the 112 yard level, although a considerable quantity of ground has been laid dry, which it is expected will be in course of working within a month from this time. The water in the mines h as hitherto been heavy, and requiring extensive engine-power, but the pitwork is now so perfect that the Herward engine, working six strokes a minute, is considered equal to keeping the mine in fork. The vein lately discovered in the 50 fm. level south from Wepere has a good branch of ore going east 2 fms. from the cross-cut, and promises well, being in maiden ground east and west.

NORTH TAMAR SILVER-LEAD MINE.—In accordance with your request, I went to see this mine, in company with Mr. Sims. The sett is situate on the north side of Beeralston village, on the northern declivity of the hill; the main lode appears to be the same as the Okel Tor, and possessing the same qualities for producing silver-lead in depth. The clay-slate is a compound of pale chloritic and grey bands, inclining southward, and the lode running north and south, with a fine leader of friable quartz, with spots and strings of lead ore, presenting every indication of a good lead ground. However, the present workings are much too high in the series, and at too great an elevation to make any great discoveries; I do not think that any large bunches of ore will be met with until the levels are below the 30 fm. level. [Here is given a section, giving an idea of the situation and extent of the present workings.] An adit has been driven southward on the lode 60 fms., and a shaft sunk from the surface 10 fms. below the adit, and within 20 fms. to the end. Also a 10 fm. level for several fms. in extent, and although the lode within the range of these workings has produced but a few tons of ore, yet, considering the high position of these levels, the contents are sufficiently favourable to warrant an engine being erected, so as to sink to the more productive ground. I would recommend an engine of about 24 in. diameter for pumping and crushing, and continue the sinking at least to the 60 fm. level, and drive the levels to a moderate extent before commencing in the stopes. The ground is somewhat heavy, and requires timbering, but by carrying on the deeper levels sufficiently in advance the lode will be drained, and consequently the upper levels easier kept in order. I expect a great improvement in the contents of the lode on reaching the 30 fm. level, and especially north of the shaft; it will then be advisable to prepare suitable machinery and floors for dressing, so as to be able to dress the poor parts without loss, and extract the stuff at a low tribute. Large development of the lode, and facility of extraction and dressing, are the only means by which mines can be rendered permanently profitable. Therefore, since the lode and the ground present such favourable indications, the mine deserves the necessary outlay for the above works, and being carried on in a steady mining-like manner; if this is done, there is every prospect that it will become a profitable concern. Many good setts are rendered worthless for the want of adopting an economical and judicious system of working at the commencement, and by attempting to make early dividends from shallow branches. A suitable capital, well laid out, will enable you to break the ground at a cheaper rate, and thus be less dependent on the richer bunches for making profits. There are few setts in the neighbourhood presenting such prospects, and, therefore, I would recommend the mine being prosecuted at deeper levels immediately, with the aid of steam, and if you carry it on economically and judiciously there can be little doubt of a successful issue.—EVAN HOPKINS: *Tavistock, July 9.*

NORTH WHEAL ROBERT.—In our adit level the lode is 5 feet wide, composed of prian, peach, flookan, and spar, with some stones of ore—taking it altogether, a very promising lode. We set this level on setting-day (24th June) at 3l. 10s. per fm. to six men; also the stuff to wheel and draw with tackle, at 20s. per fm., to three labourers. We intend to work our engine-wheel on Friday next, and as soon as the water is forked we shall resume with all possible speed the sinking of Murchison's engine-shaft; the men are now engaged in putting down the pitwork. I hope to be able to set the shaft by the middle of next week. Two men are engaged in painting the wheel and all the other machinery.

PENHANGER.—The men have driven on the course of the lode about 5 fms., and there is nothing worthy of remark since last report.

PENNANT AND CRAIGWEN.—There is no alteration in No. 1 adit since my last report; there is more spar in Bushe's adit, with prills of lead in it; this shows that we are getting near the lode, which I have no doubt will cut rich, as there is a good course of ore in Benjamin's adit, just above where Bushe's adit will intersect the lode.

PENTIRE GLAZE AND PENTIRE UNITED.—I am happy to inform you that everything is going on most satisfactorily at the mines; indeed, our prospects are improving every day. In the 10 fm. level below adit, driving north, there is a very fine lode, worth at present, as stated by Capt. Jehu Hitchins, 50l. per fm. We have just sampled upwards of 30 tons of lead ore, and, in a few words, the mine never looked so well or so valuable as at present.

PENZANCE CONSOLS.—In our stopes, west of Carthew's shaft, we have had a good lode of tin, which is still holding, and from its present appearance there is no doubt of its being very productive at a deeper level. In the end going west on the new lode the lode is 2 ft. wide. In driving this end we have cut another lode; I cannot yet tell its size, as we have not broke through it, but I have the pleasure to say I have this day (July 5) broken some fine stones of tin from it, and I think, as it intersects it, it will make a good lode; it is in whole ground to the surface, and I never saw a kindlier lode. The tributers are getting on very well, and the mine on the whole looking prosperous.

PRAED CONSOLS.—The north adit is now holed to the old workings, and we have let down a considerable quantity of water, but some days must elapse before we shall get fairly into them. There is now a handlift put into the shaft near the cross lode, which will keep the water easily. The men have commenced stoping on the lode, which is a very good one, with beautiful stones of tin, altogether worth about 15l. per fm. We shall now be raising large quantities of tinstuff, and we ought to have the stamps ready, when we should return tin every month.

RIX HILL.—The 50 east is in a horse of killas. I hope my next will report the northern part of the lode cut and rich. In sinking middle shaft below the 50, the lode has improved both in character and size, and is producing some good stones of tin. I have put the men to rise in the back of the 17 fm. level, west of Tregaskis's pitch, west of middle shaft, to see if we can cut the floor of tin going west in the pitch.

RHOSWYDOL (LEAD).—Capt. M. Frances reports as follows:—There is a good course of ore in Davie's level, with a healthy looking lode, such as I have seen in some of our best mineral properties. The lode has not been cut through for its whole width; the part taken down, which is the width of the level, or from 4 to 5 feet, contains a substantial body of ore, and I have no doubt that this ground is connected with a still stronger and more solid lode of ore to the eastward. The rocks of ore in the slide are of good size, and many of them half solid.

SILVER VALLEY AND WHEAL BROTHERS.—I am glad to say that, during the last week, the prospects of the mine are brightening. The silver lode in the 24 and 35 fm. levels, west from Oak shaft, is large, composed at both levels of flookan, white iron, silver, and silver-lead—some of it is saving work; and, from the nature of the ground, we anticipate soon having more valuable ore. The cross-cut to the tin lode is in from the shaft about 9 ft.

SOUTH TOLGUS.—The north lode, in the 54 west, is 15 inches wide, very promising; the south lode, in the rise in this level east, is yielding 1 ton per fm. The rise in the 42 west, on the north lode, is yielding ¼ ton per fm., and the south lode in the 42 east 1 ton per fm. Youren's lode, in the 32 west, is worth 2½ tons per fm. The winze from the 22 west is yielding 1½ ton per fm. Youren's lode is expected to be cut in the 42 fm. level in the course of the week.

SOUTH WHEAL TRELAWNY.—We are still cross-cutting west with six men; ground much as last mentioned, and all the other places are in a regular course of working.

TRELAWNY.—The Trelawny shaftmen are engaged cutting ground for bearers, cistern, &c., as noticed in last report. In the 92 end north the lode is 3 feet wide, and worth 8l. per fm.; in the south end, in this level, the lode is 3 ft. wide, worth 8l. per fm. In the 82 end north the lode is 3 feet wide, and worth 16l. per fm. In the 72 end north the lode is 2½ ft. wide, and worth 7l. per fm. At the north mine, in the 78 end, north of Trehane, the lode is 2½ ft. wide, and worth 7l. per fm. In the 68, north of ditto, the lode is poor at present, but are expecting an improvement shortly; Smith's shaft is down to the 68, and the men are now employed sinking for bearers and cistern. In the 55 end, north of ditto, the lode is split at present, and poor, but having ore ground 30 fms. in length in the level above, before this end, we may reasonably hope that this will not last long. Our stopes, on the whole, are not yielding as much lead, in consequence of being so much harder. We sold on the 1st inst. 100 tons (computed) lead ores to the Tamar Smelting Company, at 20l. 1s. 6d. per ton.

TRELEIGH CONSOLS.—Christoe's Lode: In the winze below the 90 there has been no lode taken down this week; in the 90, west of Garden's, the lode is 20 in. wide, worth 12l. per fm. In the 80 west, 18 in. wide, with stones of ore; ditto, east of Christoe's, the lode is 2 ft. wide, with good stones of ore—hole bored 6 ft. before the present, but not yet holed.—Parent Lode: In the 64 cross-cut, north of Parent shaft, we are driving to cut Parent lode; in the 64 cross-cut south we are driving to cut the middle lode. In the 30, east of Parent engine-shaft, the lode is 3 feet wide, with good stones of ore, and is looking more kindly.—Middle Lode: In the 40, west of cross-cut, the lode is 18 in. wide, with stones of ore. At Burgess's shaft, below the adit, the lode is 15 inches wide, with but little ore.

TRELOWETH.—Since last report, Harrison's shaft has been sunk about 7 ft. The lode is much the same in value as before; the better part is in the east end of the shaft. The 32 cross-cut south is in hard ground; we are not certain as yet whether the lode in the shaft has been cut in this level. The shaftmen have been generally cutting leat in the 45, and making preparations for fixing drawing lift at this level.

TYWARNHAYLE.—The 90 east still continues good, and the lode in Bennett's shaft is looking much better, with a prospect of further improvement. The new shaft, sinking from surface on the lead lode, is looking well, and now producing half a ton of lead ore per fm.

WELLINGTON.—The lode in the 50 fm. level, east of the engine-shaft, is 1 ft. wide, producing some good stones of copper ore and tin, looking more promising than for some time past; in the same level, west of this shaft, there is no change to notice since the last report. No. 1 lode, in the 20 fm. level, east of the western whim-shaft, is 1 ft. wide, producing a small quantity of copper ore; in the same level west the lode is 15 in. wide, poor. In the western adit we have not yet intersected the engine lode. No. 2 lode north is still producing some good tinstuff. Fisher's lode, in the adit level, east of the whim-shaft, is from 1 to 2 ft. wide, worth for tin 3l. per fm.; in the same level, west of this shaft, the lode has been rather disordered for the last 2 fms. driving, but is now making regular again, and tinny. We sampled, on Saturday last, 283 barrows of tinstuff.

WEST GOGINAN.—The engine-shaft is now down 7 fms. below the 15 fm. level; the lode at present is 6 ft. wide, with a mixture of killas, luck, mundic, and spotted with lead ore. The lode in the deep adit level, driving east from the old shaft, is 4 ft. wide, and spotted with lead ore throughout, but not of any value at present. We shall finish the cutting out of the wheel-pit by Friday, the 11th inst., immediately after which the masons will commence building the walls; the smiths' crank will be shortly completed for the wheel.

WEST WHEAL JEWEL.—The 85 fm. level, driving west of Williams's cross-course, on Wheal Jewel lode, is worth 12l. per fathom—drove last month 2 fms. 5 ft. 3 in. The wine sinking below the 70, west of cross-course, on same lode, is worth 5l. per fm.—sunk last month 1 fm 3 ft. The 57, west of Hodges's cross-course, on Tolcarne tin lode, is worth 6l. per fm.—drove last month 1 fm. 2 ft.; the winze sinking below this level is suspended by order of the committee, to enable us to set the stopes above the level on tribute—sunk last month 1 fm. 3 ft.; the stopes in the back of this level are set on tribute, lode worth 20l. per fm—stoped last month 6 fms. 1 ft. The 57 east is producing stones of tin—drove last month 1 fm. 3 ft. The 42, west of Quarry shaft, on Tolcarne tin lode, is worth 15l. per fathom.—drove last month 2 fms. 2 ft. 6 in. Quarry shaft, sinking below the 42, lode unproductive—sunk last month 2 fms. 1 ft. 6 in. Tregoning's shaft, sinking below the 30, sunk last month 1 fm. 2 ft.; this shaft is suspended for the present, or until the 42 fm. level is extended west of Hodge's cross-course. The winze in the bottom of the shallow adit level, west of Tregoning's shaft, on same lode, is suspended; we have set two tin pitches in the bottom of this level; there is not sufficient air to work the pitches and continue the winze—sunk last month 2 fms. The pitch in the bottom of the 12 fm. level, east of Tregoning's shaft, is not taken; the stopes in the bottom of the 12, west of Tregoning's winze, are worth 22l. per fm.

WEST WHEAL RUSSELL.—The lode in the 37 fm. level, driving west, continues much the same as when last reported—producing good work.

WEST WHEAL VIRGIN.—We have taken down the lode in the eastern end in the 19 fm. level, and have a large and kindly lode going forth in the end; in the western end the lode is just the same as last reported. We are still sinking the shaft to cut the south lode, and expect to cut it in sinking 6 ft. deeper.

WHEAL ARTHUR.—I shall have about 10 tons of good ore to sample about the 14th of this month, for which I expect to obtain a good price. The course of ore is looking very well, and we must prepare a crusher as soon as possible.

WHEAL AUGUSTA (TIN).—In the 10 fm. level, east of the engine-shaft, we have two tribute pitches, working at 10s. in the 1l.; the lode is from 10 to 16 in. wide, and of excellent quality. In the 18 fm. level the lode is 20 in. wide, producing excellent stones of tin, and the end has a good appearance; in the same level, west of the engine-shaft, we have broken through the wall of the new lode, which is from 8 to 9 in. wide, producing tin. In the 30 fm. level east the lode is from 5 to 6 in. wide, and on Saturday, July 5, we broke some excellent stones of tin out of the lode. On our new shaft, east and west of the lode, we are still sinking; the lode is first-rate going down, and the water very quick; we want an engine to be erected as quickly as possible, for the working of this mine effectually, and I think that, by erecting a steam-engine at once, we shall be able to turn up a large quantity of tin ore, which would give great satisfaction to all.

WHEAL CAROLINE.—Since the last meeting, we have sunk the engine-shaft to the 25 fm. level, cleared and secured the level to the eastern end, and we are now driving this level east at 4l. 10s. per fm.; the lode is 17 to 20 in. wide, composed of peach, mundic, and good stones of tin; this lode is much improved since we commenced, and will about pay the expense of driving. We have also sunk the eastern shaft to the 25, and drove a cross-cut north to cut the north lode; at the point of intersection the lode is poor, but we are not yet so far east as where the course of tin was left going down in the level above; we have sunk a winze from the 14 to this level, west of the tin ground, to let down the water and for ventilation. We are now stoping the bottom of the 14; the lode is 18 in. wide, all saving work. On the whole, I consider we are now about paying cost, and in driving the 25 fm. level east (if the lode continues as it is) we shall lay open good tribute ground.

WHEAL CREBOR.—The tributers at the 54 are breaking a fair quantity of ore. I have been obliged to take out the men from the pitch at Cock's, to make up the full number of men in the shaft, to do the work in preparing for our pitwork in time for the engine. At the engine-house we are laying the granite for the loading, and boring the holes for the tyedown bolts. We have had a delay in the delivery of our granite; having no more delays of this kind, our masonry will get on fast, as the stack and boiler-house are going up at the same time. The floors of the house, and other work of the houses belonging to the carpenters are almost ready; the shears is up and completed, and the capstan will have the new rope on it this week. The bottom of our first plunger, and a great part of the pumps for the same, are on the mine. This plunger will be 50 fms. in length, and we shall commence sending it down next week, all being well. Excepting the little delay of the granite, every thing is going on favourably.—I have not yet heard anything about shipping the engine.

WHEAL EDWARD (CALSTOCK).—Since last week our lode has been much improving, and we are expecting to have a course of ore every day, as the lode has increased in size, being now about 4 ft. wide. This morning (July 9) our night corps of men showed me some stuff, saying they had cut a beautiful course of ore; and on going to the mine I found they had a branch 6 in. wide, solid blocks of yellow ore, all fit to go to pile: the branch is on the north part of the lode, on the footwall; I saw it about halfway over the shaft, and I hope by to-morrow the men will sink so deep that it will be all over the shaft. The branch increases in size as it goes deeper, and I have no doubt, from the small branches of ore throughout the lode, that it will fall in at a depth of 2 or 3 fms. more, and make a body of ore.

WHEAL GATE-POST.—The surface work here is progressing very satisfactorily. The lode mentioned in last week's report as having been discovered about half a mile from the main points of working has since been sunk 15 ft., in order to prove the underlie, &c., preparatory to commencing an engine-shaft. At this depth the lode is 5 ft. wide, and is composed of a beautiful gossan, white spar, and prian, intermixed with black and yellow ore, saving work. In costeaning north from this lode, about 90 fms. from it, another lode has been cut, about 2 ft. wide, producing mundic, gossan, and spots of yellow ore, and presents a very strong and kindly appearance. There are still about 400 fms. of ground to costean before reaching the northern boundary of the sett, and in which it is expected more lodes will be met with.

WHEAL GUSKIS.—We have now reached the 10 fathom level below the adit, where we have come at Martin's lode, which I find to be of a most promising character, producing very good tinstuff, and which, from its appearance, will open very good tribute ground, such as I think will well remunerate the adventurers for their outlay, and leave a fair profit. The lode is 18 in. wide, improving in size and quality as we get deeper. The tin is not of a showy description, but produces well on trial: some of our bans show a value of nearly 50s. a barrow. One of our miners, working in the shaft, who has been brought up at the stamping mill nearly all his lifetime, has just bought some shares, and appears highly pleased with his bargain. I do not know the price, but no doubt at a premium. We shall complete our line of rods as quickly as possible, so as to attach our wheel for pumping the water we have now to contend with by hand labour. And now that the value of the lode is ascertained, we must sink with all the expedition possible. Soon after the completion of our machinery we shall be enabled to see Guskis lode also, which I have no doubt will turn out well, as it is a larger lode than Martin's, and the tinstuff of a very good quality.

WHEAL HAMLYN.—There is but little change since I wrote last. The ground in the end is still very hard, but I think we are getting a little more out of the lime rock. I hope in a week or two we shall have a change for the better; at all events, this hard ground cannot continue much further, as we shall be getting near the great caunter lode.

WHEAL LANGFORD AND BARING UNITED.—The walls of the engine-house are up, and the carpenters busily engaged putting on the roof. The masons have commenced building the stack. The new whim is also completed and set to work, and the sumpmen have resumed sinking Dare's shaft. We have also again resumed driving Wheal Baring adit level with two men, stent 5 fms., price 30s. per fathom. We took down the silver lode on the 10th inst., and broke about 6 cwts. of silver ore, of tolerable good quality, and shall immediately commence dressing, to prepare another parcel for the market.

WHEAL MAY.—We commenced sinking the engine-shaft under the 10 fm. level on Monday morning last, and shall press forward with the work as fast as possible until we reach the 20 fm. level, where I am sure we shall find a good course of ore.

WHEAL PENHALE.—We have now communicated the level driven on the caunter lode with that driven on the old lode in the 40 fathom level south, thereby thoroughly ventilating this part of the mine. We have likewise cleared all the stuff that has unavoidably accumulated here in the absence of this communication, and on the 7th inst. we shall commence driving north and south on the caunter lode, by six men, in either end, wherein the lode is very rich; at the same time, we shall set 10 men to stope the back of that part of this level already driven on the lode, the whole length of which presents a very valuable lead lode. With these operations at the present prospects, there will be no difficulty to raise ore (lead and copper) to meet the expenses of the mine. The south-west end, in the 30 fm. level, continues to open good appearances, though we are not yet getting therefrom great quantities of ore. The stopes in the back of the 20 fm. level north continue to yield a large quantity of good work; their appearances have improved in the last week. The tribute pitches show very well, especially that on the caunter, which was set, on the 28th June, at 20s. per ton for lead, which, in my opinion, is a very good price for it.

WHEAL RUSSELL.—The ground in the engine-shaft is not so favourable for sinking, it being harder, mixed with capels and branches of spar, containing portions of copper ore. The driving of the 48 south is suspended, and the men are employed in putting up a rise in the back of this level to communicate with a winze sunk below the 37 fm. level some time since, which we hope to complete in a fortnight—this will lay open some good tribute ground. The lode in the 48 west is improved since last report, it being at present from 3 to 4 ft. wide, producing good stones of ore. The lode has not been intersected in the 37 north on the cross-course, but we are daily expecting it. In the 16, driving south on the cross-course, in the last 6 ft., some pretty strings of rich copper ore have been met with, which look promising for the lode to the east of the cross-course. Lately we have been putting up a lobby from the Tamar river considerably to the east of the present workings, with a view of seeing the lode to the east of the cross-course, and also if possible to ascertain its heave, having a course of ore cut completely off by it for upwards of 30 fms. high. I am glad to say that a lode has been discovered full 8 ft. wide, showing a kindly appearance, with gossan, mundic, peach, spar, &c., and from its present direction cannot be far from the end of the 16 fm. level, which must evidently cast a new light on the eastern part of the mine. The pitches continue producing as much ore as when last reported.

— *July 10.*—This sett is situate on the banks of the River Tamar, which divides Cornwall from the county of Devon, and immediately adjoining to the Bedford United Mines, which have sold thousands of tons of ores, and paying regular dividends. On the side of the river the sett adjoins the Old Gunnis Lake Mine, which paid, in a very short time, nearly 90,000l. in dividends, and lies about half a mile west of the Devon Great Consols Mines. I found the strata very similar to the last-named mine. They have sunk an engine-shaft from 50 to 60 fms. deep, and driven many fathoms on the course of the lode, which has given considerable quantities of ore; in the last two months they have sold 82 tons of good quality ore, raised at a low tribute. I find they have sold since the beginning of February about 900l., worth of ore, and have raised and dressed 60 tons more, which will make in the six months about 1200l. worth of ore. It is one of the cheapest mines in the locality for working expenses; they have every necessary erection on the mine, and machinery for carrying out their operations, which power is derived from a stream of water from the Tavistock Canal, enabling them to work their mine without the assistance of steam-power. The wheel is 36 ft. high, 4 ft. breast, which has attached a drawing-machine, stamps, crusher, and apparatus for pumping, which does not require any great amount of power—our lifts being only 7s.-in. bore. Our floors adjoin the River Tamar, which gives every facility in shipping our ores, so that we are enabled to do this work without the assistance of horses, which item, in mines generally, figure high in the cost-sheet. In conclusion, I have no hesitation in saying that this will stand very shortly as one of the best dividend-paying mines in the county.

WHEAL TREMAYNE.—The boundary engine-shaft is sunk 2 fms. under the 73 fm. level; the floors of spar, last reported as disordering the branches, are speedily disappearing, and a clean killas ground coming in, with improvement in the branches; they are now worth 30l. per fm. The shaftmen have commenced fixing a drawing lift in the 73, which will be completed next week, and the sinking of the shaft will be resumed again; in the 73, east of boundary, on the engine lode, the lode is 18 in. wide, worth 4l. per fm. In the 63 fm. level, east of Allen's shaft, on Allen's branch, the branch is worth 26l. per fathom; ditto, west of shaft, on the same branch, is worth 10l. per fm.; in the same level, east of shaft, on the engine lode, the lode is heaved south by the flookan, where the men are now engaged driving, and we expect to intersect the lode this week. In the winze sinking under the 53, east of Allen's shaft, on Allen's branch, the branch is worth 16l. per fm. At Painter's flat-rod shaft, on the south lode, sinking under the 50 fm. level, the lode is 9 in. wide, chiefly composed of flookan and spar; this shaft is now down under the 50 fm. level 11 fms. 3 feet, and we intend sinking 3 fms. deeper before we drive. In the 50 fm. level west the lode is 1 foot wide, chiefly composed of spar, with some stones of ore, opening tribute ground. In the winze and stopes under the 40, west of shaft, the lode is 15 in. wide, worth 9l. per fm.; in the 40, west of west whim-shaft, on the same lode, the lode is disordered and split in two parts, chiefly composed of flookan. At Madron's shaft, on the south lode, in the 70 fm. level cross-cut, south-east of shaft, the men are still engaged cross-cutting through the flookan, and we expect to intersect another part of the lode shortly; in the same level, west of shaft, the lode is 18 in. wide, unproductive. At Goldsworthy's shaft, on the middle lode, in a winze sinking under the shallow level, the lode is 18 in. wide, worth 4l. per fm. At Champion's shaft, on the north lode, in the 10 fm. level west, the lode is 4 ft. wide, worth 11l. per fm.; in the 10 fm. level cross-cut, north of middle shaft, on the same lode, the ground is good for driving, and we expect to intersect the lode shortly. Middle shaft is suspended for the present, in consequence of the water not being drained by the level under. In the 30 cross-cut, west of Laurie's shaft, for a communication with middle shaft, the ground is eased for driving, and will be communicated shortly. Our tribute department is looking well, and but for the loss of time in stamping, from attaching a new axle with 12 heads, and a larger boiler to the steam stamps, the profit for this account would have been as much as at the last meeting. We have now 48 heads working, which we consider will be sufficient for the tinstuff raising, and have no doubt of increasing our returns for the next account.

WHEAL WILLIAMS.—We put our engine to work on Saturday last—it is all working exceedingly well. I have also set six men to cut down, case, divide, and make complete, 13 fms. from surface, at 18l. per bargain. We are getting on with capstan, shears, whim, &c., as fast as we can.

FOREIGN MINES.

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares, June 28.—This being our setting day for July, we have set the various tut-work bargains and such portion of the tribute pitches as had run out, with additions, as more particularly referred to in the following remarks:—The 55 fathom level has been driven in June, west of Wilson's shaft, 3 fms. 0 ft. 3 in., and is reset to three Englishmen, with Spanish labourers, at 950 reals per fm. The lode is worth 1½ ton per fm., and the end is troublesome for driving. In the 55 fm. level east the men have for a part of the month been stoping the lode from the bottom of the "Tantoo," for our guidance in the future extension of the level, and because we cannot expect greater facilities than at present for breaking this ground. It is set to three Englishmen, with Spanish labourers, at 1 real per arroba for lead ore, the association paying all costs. The north part of the lode on which the men have been lately stoping is worth about 6 tons per fm. The 54 fm. level, west of San Juan shaft, has been driven during the month 13 varas 2 ft. 6 in., and is reset to the same pare, four men, at 200 reals per vara, with 1 real per arroba for lead; the lode in this end is worth 1¾ ton per fm. The branch to which I alluded in my last as having been cut in the cross-cut driving south from end, proved to be about 7 ft. wide, worth ¾ ton of lead ore per fm. We do not consider this to be the main part of the lode, and have put the men again to drive on the other part, at 350 reals per vara, leaving for a little time the further proof of the identity of this lode with that in the pitch working under the 31 fm. level, till we can bring a winze through, and thus effectually determine this point. We have cleared in the 31 fm. level, east of Shaw's shaft, about 6 fms. in the past month, and shall continue this work as fast as we can, in order to open the eastern part of the mine. Shaw's shaft has been sunk at 650 reals per vara; it will probably take two months more to complete this shaft to the depth of the 55 fm. level. The tribute pitches now in work are nine, and the total number of men on tribute is 46, at about the usual average tribute; and on this setting list we expect to raise 160 tons of ore, including the slimes from the dressing floors. I annex stock account.

Lead ore weighed in, about 36 tons: total in stock, 1060 tons. Pig-lead weighed in, about 22 tons: total in stock, 104 tons.

ROYAL SANTIAGO MINING COMPANY.—[Received July 7.]

Cobre, June 2.—Perseverancia.—The water is in fork to bottom of Perseverancia shaft (formerly Thompson's). We have named the engine-shaft in Fortitude, Thompson's, and commenced to cut plat in 32 fm. level; the part of the lode we have seen is small and poor. The 32 has been driven 31 fms. 3 ft. west of shaft—lode small and poor; in the 22 east the lode occasionally yields some good stones of copper ore.

San Joaquin.—Taylor's shaft has been sunk 5 fms. 5 ft. 8 in. below the 10; we are intending to sink it a few feet deeper, and then to drive west to communicate to the winze sinking below the 10, which will be a great advantage to us in raising copper ore; in this winze the lode is from 4 to 5 feet wide, producing about 7 tons of copper ore per fm.

In the 10 fm. level, driving west, the lode is from 4 to 5 ft. wide, producing 3 to 4 tons of copper ore to the fm. In the deep adit level, driving west, the lode is small and poor; in the winze sinking below this level the lode is from 3 to 4 feet wide, composed of gossan and mundic, with spots of copper. In the shallow adit level, driving west, the lode is small and poor; in the winze sinking below this level the lode is from 2 to 3 ft. wide, composed of gossan and iron.

Fortitude.—Thompson's engine shaft has been cut down and timbered 8 fms. New Isabellita shaft has been sunk from surface 16 fms., ground favourable for sinking.

Angelita.—At Descubrierta shaft the lode is from 4 to 5 ft. wide, composed of gossan, iron, and spar; we have commenced to drive east from this shaft at the adit level, to communicate to the level driving west from Goodhope shaft. I think our prospects never looked better than at present.—Our raisings for the past month are about 124 tons.

UNITED MEXICAN MINING ASSOCIATION:—

Guanazuato, May 30.—Rayas.—I beg to enclose the monthly report of the mines by Mr. Parkman. The general produce of Rayas has decidedly improved in the past month both in quality and value, and should the present encouraging prospects in the frente of San Toribio be realised, an increased extraction may be looked for. It must, however, be borne in mind that the mutations in this mine are so sudden and unexpected, that but little confidence can be placed in the most favourable indications. The stoppage of operations in the Hacienda of Barrera having caused a temporary accumulation of ore over my present reduction power, I have considered it judicious to dispose of the surplus, reserving sufficient for the wants of Casas Blancas and Duran, as will be explained under the head "Haciendas." The returns for the month of April were $17,940 1 2.

Aldana.—The operations here have produced nothing of interest or importance.

Jesus Maria y Jose.—A closer proximity to the vein is day by day more plainly manifesting itself in the cross-cut of San Ignacio.

Promontorio.—All stores are removing from this mine, and on the 3d proximo it will be delivered to the owners.

Trinidad.—Ventilation has continued, and the ground is favourable for driving. The expenses are reduced one-half.

Mina Grande.—The cross-cut of San Jose into the principal vein has, in the month, given some stones of very good ore, but has presented no formal deposit. The indications, however, lead to the belief that the ore will most probably make towards the lower wall of the vein.

Haciendas.—The unusual extension of the dry season has prevented operations in Barrera, which remains paralyzed, in company with nearly half the haciendas in and about the town. Appearances, however, and the near approach of the rainy season, induce me to hope that in another week this temporary difficulty will be obviated. To replace in part the hiatus in the reduction of the Rosas ores, I have fully employed Casas Blancas on the same, with Duran. Dolores continues employed as before on bought ores. The high price of forage is still maintained.—J. H. Glass.

Report on the state of the workings in the mines of the United Mexican Mining Association.

May 28.—Rayas.—The unimportant improvement in the sales of buscones' ore during the past month is ascribable to an increased demand for ore, rather than to any favourable change in the workings.

Frente de Santo Toribio.—This level has advanced 15·67 varas, and has again so much improved that we are opening another pozo in the ore cut through. The vein presents a more formal appearance than it has in any point in the last 100 varas driving here.

Crucero de San Dimas.—This cross-cut, commenced in the last month, is directed towards the lower wall of the vein, from the level of San Toribio. It has advanced 7·36 varas, and will be discontinued, should it not cut ore during the coming month.

In the workings of San Diego and Santa Isabel there is no change worthy of mention. The vein continues wide, with ramifications of poor ore.

In the workings of San Cristobal and San Crecencio, near the bottom of the pozo of Santo Toribio, a few workmen continue to be employed, and produce a small quantity of fair ore. It is from the different workings of the Contra Cielo of La Purisima that the greater part of the produce of the mine is derived, and to this ore we are indebted for an improvement in the average ley of the produce of the mine. In a certain point of these workings we shall soon be interrupted, by coming in contact with the rights of the Promontorio Mine; but, fortunately, the best and most abundant ore is tending to the north-west, where we have a wider space for working ore. Were it not for the ventilation created by the communication with Promontorio, these workings and this portion of the mine generally would have become long since inaccessible. During the last five weeks the average number of barmen employed by day and night has been 78, and the produce of dressed ore remitted to the haciendas is 2850 cargas.

Aldana.—The trial of the vein in this mine has continued on the reduced scale latterly adopted. The level of the Refugio has advanced 8 84 varas, without any important change. The level was then suspended during two weeks, in order to drive a short cross-cut into the vein. In this last 5·37 varas were driven, and as the vein presented a very unpromising appearance, the level to the north-west has been resumed. All that can be said of this level at present, is that the end now presents a more formal vein than at any point in the last 50 varas, but as yet it is poor.

La Trinidad.—In this mine, in conformity with the plan indicated last month, operations have been limited to the work of communication between the mine and shaft. This work following the small vein, on which the mine is opened in soft rock, has advanced 21·50 varas.

Mina de Jesus Maria.—The cross-cut of San Ignacio has advanced 11·98 varas. The indications presented by the rock are that we may expect to cut the vein very soon, probably during the month. The cross-cut from the mine has advanced 14·16 varas, and continues in rock favourable for driving. The new work, called San Ricardo, advanced 20·08 varas, and after cutting through the vein sought for, has been turned to the south-east, along the direction of the same. The vein where cut is poor, but presents those appearances which in this district are considered favourable for ore.

Mina Grande.—The cross-cut of San Luis has advanced 6·10 varas, and has not as yet cut the main vein. The frente of Santa Isabel, opened on the last branch of ore cut in the above-named work, was continued as a destago 2 varas, and barmen have since been employed therein. The ore has to the north improved, and again declined in the course of the month.

Pozo of La Bomba and Cross-cut.—In this work less progress has been made than in the last month, having advanced but 2·68 varas—therefore, we are unable as yet to report any certain results as to the state of the mine. The level of Noche Buena was continued 3·20 varas, at which point a cross cut was commenced into the San Luis branch of the vein, which has advanced 3·85 varas, producing thus far only threads of ore. The cross-cut of San Jose has advanced 5·51 varas. In this distance some better ore has been met with than had been seen heretofore, and the end still continues ramified by threads of ore. In summing up, it must be conferred that we are not enabled to give the encouraging information we had hoped; but this, as we believe, is ascribable to the slow progress of the cross-cuts.—S. P. Parkman.

Kilbricken Silver-Lead Mines.—We received a communication on the eve of going to press (which precludes a lengthened notice, such as we should feel disposed to make), directing attention to what our correspondent considers an objectionable proceeding in the introduction of another Irish mining adventure, through the means of a "private prospectus." The mines are stated therein to have given a profit during the last month of working of 800*l.*, while they were abandoned on account of the adventurers not paying the calls made! This is certainly somewhat strange. We are further informed that the mine has been purchased at 1500*l.* to 2000*l.*, the projectors of the company taking some 200 per cent. by way of profit. Our correspondent promises further information; meanwhile, with every desire to serve Ireland, we wish that caution should be exercised in prosecuting mining operations: we trust the parties concerned will also forward a communication for publication, explanatory of the circumstances stated, for it would, indeed, be melancholy to find an evident desire on the part of the public to interest themselves in developing the mineral wealth of Ireland marred by any act calculated to throw a doubt on the nature of the speculations introduced to their notice.

The Gold Region in Bolivia.—A letter received by the last South American mail says:—"I have again to call your attention to the subject of Curabaya. It is supposed that this will be a second California. They are discovering every day new and immensely rich veins of gold, but from one mine alone, which is several yards wide, and which is partly owned by a distant relation of mine, they have got out already 24,000 quintals of ore, which will yield an amount of from $200,000 to $250,000 in gold. This is only waiting for proper machinery for grinding. Curabaya differs from Tipuani in one respect, where they are veins and not washings, although these last exist as well, but are not worked on account of the sources of the gold—that is, the veins—being on the surface. The stories told of the riches (and they gain strength every day) are almost incredible, and every one here is endeavouring to get a share in some of the undertakings. I wish I could convince you and others of the unheard-of riches which have never been explored by the Spaniards, and which are only now coming to light."

ACCIDENTS.

The Colliery Explosion in Staffordshire.—On Monday an inquest was held, by adjournment, at the Swan Inn, Netherton, on the body of Josiah Perry, aged 13 years, one of the nine unfortunate persons who were killed by the explosion of gas at Mr. Geo. Dudley's pits, at the Five Ways, Cradley, as noticed in last week's Journal. The inquiry was attended by Joseph Dickinson, Esq., inspector of coal mines, of Manchester; and Mr. E. Dudley, solicitor, was also present to watch the proceedings on behalf of the proprietor of the colliery. The jury, after a lengthened investigation, returned a verdict of "Accidental death," occasioned through the culpable negligence of the "doggy."

Coaseford Mine.—John Searle was killed by a waggon running over his chest.

Garth Colliery.—Evan Thomas and Daniel Richards were suffocated in this colliery by inhaling coal gas. It appeared from the evidence of a brother to one of the deceased that he had observed a quantity of smoke and sulphur through the ladder pit, issuing from the underground engine. This was the only available place for ascent and descent on Sunday (the day of the accident), as the winding engine was not worked on the Sabbath. The men had complained of this, and although it might have been remedied at a little expense was never attended to,; between two and three month ago several men had narrowly escaped suffocation. The coroner, in summing up, left the question for the jury, whether the proprietor or his agents had so negligently worked the colliery as to render them criminally responsible for the deaths of the deceased. After considerable deliberation the jury returned a verdit of "Accidental Death," at the same time blaming the proprietor and agents for allowing the men to pass through the ladder pit, so long as the smoke and sulphur from the engine escaped through it, expressing a hope that means would be adopted by the proprietor to prevent the recurrence of such a calamity.

Standish.—One of the pits belonging to Mr. John Tyler, of Standish-Lower-Ground, has been on fire during the week. The whole of the men were set to work to extinguish the fire, which object they accomplished on Saturday. The men commenced work again on Monday morning.

Polberro Consols.—As G. Brewer was at work, a stone fell down the shaft, and struck him on the back part of the head so violently, that he died before he was brought to grass.

Merthyr.—At the Waunwylli Colliery, a stone fell down the slip, and struck a workman, who was at the bottom of the shaft: the force of the blow completely stunned him, and he now lies in a very precarious condition.

T. Walters was killed by a tram going over him, near Quaker's-yard, Ystradyfodwg.

T. Craze was killed by falling down Cwm Sybran New Coal Pit, when an explosion of fire-damp took place.

Aberdare.—T. Lewis was killed on coming up the Abergwydden pit; he, supposing the slide usually placed for the men to step upon was in its proper situation, stepped out and fell to the bottom.

THE DRUMPELLIER COLLIERY—APPLICATION OF Mr. GURNEY'S "STEAM JET."

An experiment is now making with Mr. Gurney's extinguishing system, which is the most extensive and important attempt yet made. The waste at Drumpellier Colliery, near Glasgow, is many hundred acres in extent, and upstanding—the seam being 8 feet thick and the pillars 10 yards square. The coal was fired by the flue of an underground engine on the 19th April, and it has been burning ever since. By means of stoppings and dykes, about 80 acres of this waste have been isolated, and the following apparatus established at one of the shafts:—

A high-pressure boiler, with small engine for feeding, with pipe leading to a pump at the top of the shaft; at the bottom of this pump is a steam jet, $\frac{3}{8}$-inch diameter. Opposite to this, at the distance of 50 feet, is a coke furnace, 16 feet area, with a flue between it and the shaft, which flue always contains a few inches of water, by way of cooling the gas.

When the steam jet is working, this coke furnace draws down, and the whole gas is sent to the top of the shaft at a temperature of 600°, inasmuch as it melts lead; but upon coming in contact with the steam jet it is cooled, and still further cooled by the introduction of three gallons of water per minute let down the pipe, in conjunction with the steam jet and carbonic acid gas.

The rate of discharge may be judged of by the following facts, *per hour*:—

The furnace consumes 250 lbs. of coke.	
The whole contents of the steam boiler, at 70 lbs. per inch, goes down.	
The gas flue evaporates 60 gallons of water.	
The discharge of water, in addition, is 180 gallons.	
The temperature of the gas at the end of the flue and top of the shaft..	600°
20 feet below the jet	190
At the bottom of the shaft, 36 fathoms	170
The open pipe at the one only upcast pit, where the choke damp is blowing off	80

The result of this interesting process cannot be ascertained for some time to come. On looking through the stoppings in the mine, the whole space is found to be occupied by carbonic acid gas, but there is a marked deficiency of air at the upcast pipe; whether it arises from the condensation, or some leakages towards the surface, is not at present accurately ascertained. The reduction of the temperature by the sending down of water was very extraordinary—the water being all driven into spray.

Daily records are kept of the proceedings, which are carried on with great regularity, and will be a conclusive test as to the efficiency of the system.

THE TIN TRADE.

Sir,—We beg to hand you for publication in your Journal the annexed particulars of the Dutch Trading Company's sale of Banca tin. The sale will take place on the 5th August, and will consist of 60,306 slabs in Amsterdam: 50,875 slabs in Rotterdam= 111,181 slabs, or 3707 tons.

The directors engage not to bring any more tin forward until the 15th July, 1852, and that the shipment from India for the consumption of China shall not exceed 10,000 peculs or 20,000 slabs. The sales will be made in lots of 1000 slabs each, with the usual condition of 1 per cent. draft, 2 per cent. discount, and for cash payment 1$\frac{1}{2}$ per cent. discount will be allowed, but the buyer has to pay 1 per cent. for sale expenses. The company undertake the warehousing of the same against payment of 1 guilder 30 c per 100 slabs monthly, including fire insurance, but the company also give three months' time from the date of sale for the removal of the tin. The stock on second hands is on company's warrants 39,840 slabs in Amsterdam; 10,598 slabs in Rotterdam; and we estimate 10,000 slabs in private warehouses=60,428 slabs, or 2014 tons.

The quantity brought forward this year is about 5000 slabs less than was anticipated, and considerably less than for the last two years, the quantity brought forward—

1847	119,955 slabs, or 4000 tons		
1848	84,943	„ or 2833	„
1849	249,947	„ or 8333	„
1850	117,766	„ or 3925	„

The quantity of tin required yearly for the consumption of foreign countries may be estimated—30,000 America, 70,000 France, 50,000 Germany, 10,000 Holland, 30,000 Russia, Italy, &c.: total, 190,000, or 6333 tons.

The import and delivery of tin in London for the first six months of the last three years have been—

	1851.	1850.	1849.
Import	1014	374	232
Delivery	714	369	230
Stock	1095	647	154

The present stock may be considered heavy, but it must be remembered that a good deal of Banca tin is at present lying here instead of in Holland as heretofore, and also that we have received 400 tons from America, and 100 tons from Spain, these being from unnatural channels, and the tin only having been sent here under peculiar circumstances

From the preceding statement, it appears that one of the most important points requiring notice is the immense increase in the consumption of foreign tin in this country, having been in the first five months of this year about 100 per cent. in excess of the corresponding period last year, and upwards of 300 per cent. over that of 1849, thereby demonstrating that the production in this country is becoming every year less and less adequate to meet the extended consumption.

The immense increase in the demand for tin-plates for exportation is also a point requiring especial notice. The declared exports of tin-plates during the first five months of the following years have been—1848, 217,475*l.*; 1849, 269,927*l.*; 1850, 404,417*l.*; 1851, 497,867*l.* At the rate at which the shipment is now going forward, not less than 4000 tons, or equal in quantity to 120,000 slabs, of tin will be required during the next 12 months for the manufacture of tin-plates for exportation alone. It, therefore, seems evident, judging from the deficient production in England, that a considerable portion of the required quantity of 4000 tons will be taken from the forthcoming sale in Holland, and the ordinary wants of the continent, as previously noticed, being estimated at 190,000 slabs annually: we may pretty safely infer that with such extensive demands, and with so limited a sale as 111,000 slabs, prices are not likely to rule below present rates, which are 47$\frac{1}{2}$ fl., or 81*l.* free on board, in Holland, and 81*l.* 10s. for Banca here, while it is possible we may see considerably higher prices, as was the case in 1846 and 1847, when the price rose to 100*l.*, and when the supply was more commensurate with the demand than it promises to be for the next 12 months.

The very limited deliveries from Holland during the first six months of this year would lead to the conclusion that in France, Germany, Russia, and other consuming countries, the stocks had become unusually light, and thus the orders at the approaching sale will be more than ordinarily extensive. It is also well known that the stocks in America have not been so small as at present for some years past, the import into New York for the first six months of this year having been only 7729 slabs, against, in 1850, 15,529 slabs; while, tempted by the high price of 88s. ruling here during the spring, they shipped off to this country every available slab, in the belief that they would realise upwards of 100s. The consequence of this state of things has been the recent transmission of large orders from America to purchase in this market, but the limits hitherto have been too low to permit them being executed.

The interruption in the production of tin in the East, owing to the disturbances among the natives, has led to diminished shipments from Batavia and Singapore, and by our last advices by the Overland Mail from the latter place there had not been a single shipment made, either to Europe or America, during the whole of the month of April, while during the first four months of—1851, 4211 pecals, or 250 tons; 1850, 7499 peculs, or 445 tons; 1849, 11,108 peculs, or 640 tons.

It was expected that the duties on tin would, this year, have been abolished, it being the only raw article that pays more than a nominal duty, some exertions have been made in the matter since the Budget came forward. We feel convinced that next year we shall have free trade in tin; when such takes place it will be of great service to the tin-plate manufacturers. The tin coming from the East indias is all stream tin, the ore being round stoney pebbles, the same as is found to a limited extent in this country, and from which the English smelters make their granulated tin; and there is no doubt that if the foreign tin were refined as well as the English smelters refine theirs, it would be quite equal to their granulated tin. Foreign tin being smelted with charcoal, there is a large amount of carbon infused into the metal, thus making it of a purer nature, more fluid, and of a better colour, hence the reason that in manufacturing tin-plates you have a yield equal to 2$\frac{1}{2}$ per cent. more out of the same quantity of foreign than out of the same quantity of English; but the loss upon refining must be reckoned at $\frac{3}{4}$ or 1 per cent., thereby leaving a profit of 1$\frac{1}{2}$ per cent. in the use of foreign over English; moreover the plate is better covered, and of a better colour. The largest buyers of foreign tin during the last 12 months have been the English smelters, which leads to the belief that they have taken the same to their works to improve the quality of their make, as it is well known that they have run short of that description of ore from which they make their refined tin.

The following are the highest and lowest prices that have ruled in this market for English and Banca tin since 1846:—

	1846.		1847.		1848.		1849.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.
British block	87s to 103s		85s to 98s		73s to 82s		73s to 92s	
Banca	80s to 132s		84s to 102s		75s to 86s		72s to 95s	

	1850.		1851.		1851.
	High.	Low.	High.	Low.	Prices July 12.
British block	74s to 85s		83s to 88s		83s
Banca	70s to 88s		76s to 88s		81s

By the last advices from Holland the price was firm there at 47$\frac{1}{2}$fl., and here the price is for Banca 81s. 6d., and Straits 80.—Bateman & Von Dadelszen, jun.: *Cornhill, July* 11.

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

F. Rosenborg, Esq., of the Albany, Middlesex, for improvements in the manufacture of casks, barrels, and other like articles, and the machinery employed therein.

J. B. Minices, of, Glasgow, Lanark, North Britain, engineer, for certain improvements in machinery, apparatus, or means for the manufacture or production of sugar.

H. C. Baildon, of Edinburgh, chemist, for improvements in writing, printing, or marking letters, characters, or figures upon paper, parchment, or other materials properly prepared for that purpose.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

G. Orpwood, Bishopsgate-street, register or book mark.—G. Mallock, Carpenter-street, Berkley-square, suspending hook.—J. Kimberley, Birmingham, stay and fastener for windows, doors, and shutters.—Nicholas Stead and Son, Hulm, Manchester, ventilating chimney-top.—Bathgate and Wilson, Canning Foundry, Liverpool, mettalic cask.—J. Pannell, Fetter lane, the retort calorifere for conservatories, green-houses, &c.—T. F. Griffiths, Birmingham, portable cooking stove.—G. Chambers and Co., Priory-mills, Studley, and Gresham-street, needle eye.—S. Last, New Bond-street, and Oxford-street, prend-tout, or railway portmanteau.—Simcox and Pemberton, Birmingham, blind roller, and swing-glass axle.—R. S. Bartlett, Redditch, part of a watch key.

PROVISIONAL REGISTRATIONS.

Harrild and Sons, Great Distaff-lane, printer's mitring guard.—G. Pigall, St. Martin's-court, Leicester-square, watch-guard.—R. Timmins, and Sons, Pershore-street, Birmingham, loose heater or Italian-iron curling tongs.—*Mechanics' Magazine.*

Current Prices of Metals, Stocks, & Shares.

METAL MARKET London, July 11, 1851.

ENGLISH IRON. *a*	*per ton.*		
Bar, bolt, & square, London	£5 2 6–5 10		
Nail rods	6 2 6–6 15		
Hoops	7 0 0–7 10		
Sheets (singles)	7 12 6–8 5		
Bars, at Cardiff & Newport	4 10 0–5 0		
Refined metal, Wales*	3 0 0–3 5		
Do. anthracite*	3 10 0		
Pigs in Wales	3 0 0–4 0		
Do. do. forge	2 5 0–2 10		
Do., No. 1, Clyde ... *net cash*	1 19 6–2 1		
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0		
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0		
Stirling's Patent Pig in Glasgow	2 15 0		
Toughened Pigs in Wales	3 10—3 15		
Staffordshire bars, at the works	5 5 0–6 0		
Rails	5 0–5 2 6		
Chairs (Clyde)	4 0 0		
FOREIGN IRON. *b*			
Swedish	11 10–12 0		
CCND	17 10 0		
PSI	——		
Gourieff	——		
Archangel	——		
FOREIGN STEEL. *c*			
Swedish keg	14 0–15 0		
Ditto faggot	15 0–15 15		
ENGLISH COPPER. *d*			
Sheets, sheathing, & bolts, *p. lb.*	0 0 9$\frac{1}{2}$		
Tough cake	*per ton* 84 0 0		
Tile	£83 0 0		
Old copper *e*	*per lb.* 8$\frac{1}{2}$*d*		
Yellow Metal Sheathing	7$\frac{1}{2}$*d*		
Wetterstedt's Pat. Metal†	*Cwt.* 1 12 0		
FOREIGN COPPER. *f*			
South American, in bond	77 0–87 0		
ENGLISH LEAD. *g*			
Pig	*per ton* 17 0–17 5		
Sheet	18 5–18 10		
Pipe	19 0 0		
Red lead	19 0 0		
White ditto	24 0 0		
Patent shot	20 0 0		
FOREIGN LEAD. *h*			
Spanish, in bond	16 15–17 0		
ENGLISH TIN. *i*			
Block	*per cwt.* 4 4 0		
Bar	4 5 0		
Refined	4 10 0		
FOREIGN TIN *k*			
Banca, H. C.	4 1 0		
Straits	4 0 0		
TIN-PLATES. *l*			
IC Coke	*per box* 1 5 6		
IC Charcoal	1 11 0		
IX ditto	1 17 0		
SPELTER. *m*			
Plates, warehoused	*per ton* 14 0–15 0		
Ditto, to arrive	14 15–14 17 6		
ZINC. *n*			
English sheet	*per ton* 21 0 0		
Quicksilver *o*	*per lb.* 3*s* 8*d*–3*s* 9*d*		

Terms.—*a*, 6 months, or 2$\frac{1}{2}$ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct. dis.; *e*, 6 months, or 2$\frac{1}{2}$ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1$\frac{1}{2}$ p. c. dis.; *o*, ditto, 1$\frac{1}{2}$ dis.; * Cold-blast, free on board in Wales. † Dis. for cash in 14 days, 10 per cent.

Welsh Bar-Iron.—There is more enquiry this week, and the market is firm. A large business has been done in rails, at prices equal to 4*l.* 15s. 6d., nett cash. There are several large orders in the market, at rates which the makers are not disposed to accept.

Staffordshire Iron is more in demand.

Scotch Pig-Iron is without much activity at present; prices have yielded during the week slightly; purchases may be made at 39s. 3d. mixed Nos., free on board, storekeepers' warrants.—In Swedish Iron no transactions are reported. [over ship's side.

Swedish Steel.—Business has been done to some extent at 14*l.* 10s., landed, and 14*l.*

Copper is in good request—at the monthly meeting of the trade on Tuesday, no alteration took place. [sellers at 81s.

British Tin is in better demand.—Foreign Tin is very firm; there are buyers at 80s.,

Spelter.—Not any transactions have transpired.

Lead is in fair demand.—Tin-plates.—A large business doing.

GLASGOW, July 10.—There has been a fair consumptive demand for pig-iron during all the week, but prices have not at all improved; and although the shipments are larger than ever known for the first six months of this year, the price is fully 5s. per ton lower than on the 1st of January last.

Mixed Nos., good brands, free on board here	39s. 9d. per ton nett cash.			
No. 1—Gartsherrie	„	„	41s. 0d.	„ „
No. 1—Coltness	„	„	40s. 6d.	„ „
No. 1—Glengarnock	„	„	39s. 6d.	„ „
No. 1—Summerlee	„	„	39s. 6d.	„ „
No. 1—Forth, free on board at Charleston			42s. 6d.	„ „
No. 1—Kinneil, free on board at Bo'ness			41s. 6d.	„ „

The malleable iron-works are still well employed—no change in prices.

BIRMINGHAM, July 10.—The first meeting of ironmasters for the quarter was held at Walsall on Tuesday, at Wolverhampton yesterday, and in Birmingham to-day. The attendance was not so numerous as on former occasions, and the proceedings in the Town Hall were altogether extremely languid and inanimate. The resolution adopted at the preliminary meeting, held at Stewponey on the 26th June, was confirmed by the great firms present, and prices accordingly remain nominally unaltered. It may be stated, however, that many sales, as anticipated, were made by parties who do not consider themselves bound by the resolution passed at the meeting of the trade, at prices lower than those settled at Stewponey. The iron trade is confessedly greatly depressed, and considerable difficulty is experienced in maintaining existing quotations.

Mines.—The characteristic features of the market have not materially changed since our last publication, when we presented a report not of an over sanguine character; whilst to do business lower prices are submitted to generally. On the other hand, there are pleasing exceptions to this state of things, and, though few in number, they demonstrate the sound opinion entertained of certain stocks, which cannot readily be had, even at the advanced offers made for them. These anomalies exist as the sequence of an almost unprecedented by-gone amount of speculation, but which has now entirely subsided, and left a reflecting period for the capitalist, which will be, no doubt, usefully employed, and, ere long, show itself in an increased demand for all sound mining property, on a basis founded upon intrinsic value alone.

In the Metal Market—Copper is very brisk, and the smelters are full of orders.—Lead continues in request.—Tin is firmer, and a sale of Banca is reported for America.

The price of gold in bars (standard) was 3*l.* 17s. 9d. per oz.; silver in bars (ditto), 5s. 0$\frac{3}{4}$d. per oz.; and new dollars, 4s. 11$\frac{1}{2}$d. per oz.

Wheal Mary Ann sold 53 tons of lead ore, at 22*l.* 6s. 6d. per ton.

Driggith Mine sold two parcels of lead ore—12 tons at 13*l.*, and 8 tons at 6*l.* 15s. per ton.

Georgia Consols sold 7 tons 14 cwts. 2 qrs. 13 lbs. of black tin on the 4th inst., which realised 389*l.* 1s.

Merllyn sold 30 tons of lead ores yesterday, at 11*l.* 8s. per ton, realising 342*l.* This was the produce of four weeks, from tutwork operations only.

The ticketings for 100 tons of Laxey lead ore varied from 15*l.* 6s. 6d. per ton by Thomas Somers, to 17*l.* 17s. by Mather and Co.

At Tamar Mines they sampled on Saturday a parcel of silver-lead ores, computed 75 tons, 8$\frac{3}{4}$ of which is from the north mine, to be sold on Tuesday; this would have been considerably more, but for the breakage of the main rod, obliging them to leave a large quantity of ore underground.

The sampling at Holmbush, on the 15th inst., is computed 30 tons.

Pentire Glaze have sampled 30 tons of lead ore this week.

Wheal Trescoll sold three parcels of tin, which realised 38*l.* 12s. 3d.

At East Wheal Rose meeting on Monday, the accounts for March and April showed—Balance from last account, 2498*l.* 1s. 4d.; ores sold (less dues), 8018*l.*; Cargoll adventurers for water charge, &c., 125*l.* 8s. 6d.= 10,641*l.* 9s. 10d.—Mine costs, coals, and merchants' bills, 5785*l.* 14s. 10d.; Stannary Court dues and other taxes, 243*l.* 9s. 9d.; discount on ore bills, 4*l.* 17s.; carriage of ore and coals, 196*l.* 2s. 1d.; by dividend of 15*l.* per share, 1920*l.*: leaving balance in favour of adventurers, 2491*l.* 6s. 2d.

Lewis Mines Company have declared a dividend of 10s. per share.

At South Wheal Frances bi-monthly meeting, on Monday, the accounts showed—Balance end March, 181*l.* 12s. 4d.; copper ore sold, 3310*l.* 10s.; tin, 519*l.* 15s. 4d. = 4011*l.* 17s. 8d.—Labour cost April, 680*l.* 13s. 9d.; May, 748*l.* 19s.; merchants' bills, 633*l.* 2s. 1d.; dues, 255*l.* 7d.; rates, taxes, &c., 57*l.* 5s. 3d.; dividend, 1488*l.*: leaving balance in favour of the mine, 148*l.* 10s. 7d., the actual profits on the two months' workings being 1454*l.* 18s. 3d. The levels of late have not been quite so good, but are again improved. The assets at next account will exceed the above by about 500*l.* As the balance in hand is so limited, the same amount of dividend only is likely to be made.

At Trehane meeting, on the 30th June, the accounts showed—Balance last account, 456*l.* 8s. 5d.; sundry receipts, 15*l.* 10s.; received for silver-lead ore, 1249*l.* 1s. 3d.=1720*l.* 19s. 8d.—By labour cost for January, 324*l.* 0s. 3d.; February, 334*l.* 3s. 9d.; merchants' bills, 267*l.* 3s. 3d.; dues, 81*l.* 8s.; dividend, 30th April, 256*l.*; balance for engine, 50*l.*; carriage, 55*l.* 9s. 1d.: leaves balance to next account, 352*l.* 15s. 4d. A dividend of 1*l.* per share was made. Kelly's shaft is down 2 fms. under the 88 fathom level, where they are fixing a 20 fm. lift, preparatory to sinking deeper, the ground being moderate. The lode in the 88 north is 5 ft. wide, worth 5*l.* per fm.; south, it is worth 4*l.* 10s. The lode in the stopes in the back of the 78 is, on an average, worth 8*l.* 10s. per fm. The stopes in the 68 are worth 7*l.* per fm. The 55 and 45 are each worth 6*l.* per fm.

At Pendarves and St. Aubyn Consols meeting on the 1st instant, the accounts for four months, ending May, showed—Balance from last account, 3048*l.* 7s.; costs and merchants' bills, 715*l.* 2s. 7d. = 3763*l.* 9s. 7d.—By amount of contract by the lessees, 3500*l.*: leaving due to purser, 263*l.* 9s. 7d.

At Towan Mine meeting, on the 30th June, the accounts showed—Cost from Aug., 1850, to end of May, 1851, 52*l.* 5s. 2d.; merchants' bills, 80*l.* 0s. 2d.=132*l.* 5s. 4d.; to pay off which, and assist in further prosecution of the mine, a call of 10s. per 612th share was made.

At East Wheal George quarterly meeting, on Tuesday, the accounts showed—Balance from last account, 128*l.* 5s. 10d.; sales of ores for March, April, and May, 67 tons 11 cwts. 3 qrs., which realised 717*l.* 0s. 1d. The cost for April, May, and June, were 545*l.* 15s.: leaving balance in favour of mine of 299*l.* 10s. 11d.

At the half-yearly meeting of the Mining Company of Ireland, on the 3d inst., Edward Aikinson, Esq., in the chair, the accounts showed a profit of 789*l.* 19s. 8d. from the Luganure Lead Mines; 468*l.* 18s. 9d. from the Slievardagh Collieries; 341*l.* 6s. 5d. from the Ballycorus Lead Works; and 75*l.* 4s. 6d. insurance account=1676*l.* 9s. 4d.—Less, part of the extra outlay at Knockmahon, 995*l.* 4s.; loss at the Cairne and Ballycorus Lead Mines, 12*l.* 9s. 6d.; Lisnacon Colliery, 11*l.* 3s. 3d.; Kilmurrin Copper Mine, 2*l.* 18s. 3d.; interest account, 232*l.* 12s. 10d.=1254*l.* 7s. 10d.: leaving a net profit of 422*l.* 1s. 6d., exclusive of 1752*l.* 14s. 6d. expended in operations for the future benefit of the company. The available assets amounted to 49,148*l.* 18s.; the liabilities, 17,251*l.* 0s. 9d. The chairman stated that the report (which will be found in another column) had been framed in the fullest manner possible, so as to convey the actual state of the present different interests, and the prospects connected therewith, in all of which there was an evident improvement, and in a short time he doubted not they would be in a still more prosperous condition. A tribute of respect was paid to their late worthy secretary, whose exertions for the benefit of the company for a long series of years are too well known to need comment; his nephew, Mr. Richard Purdy Allen, was unanimously elected to fulfil the duties of secretary henceforth; 23 years' servitude to the company is evidence of his ability to give ample satisfaction in his new capacity. Lisnacon Colliery is nearly unwatered; the seam of coal is 2 ft. thick, and having been explored to some extent, they are prepared to take advantage of any improved demand that may arise. At the Knockmahon Copper Mines an extra outlay has been incurred during the last half-year, by sinking a new shaft at the north mine, and erecting the Kilduanne engine thereon to work effectually a very promising lode lately discovered, and which the board are sanguine will soon re-imburse the outlay incurred. The prospects at Luganure Lead Mines are highly encouraging. A new lease for 41 years from his Grace the Archbishop of Dublin, at a commuted rent, without the penal clause, has been secured, and only awaits the return of his Grace for completion.

The Mining Company of Ireland has been established about 28 years,—

The paid-up capital being, upon 20,000 shares (7*l.* each)		£140,000	0 0
Profits derived up to Dec. 31, 1850	£183,856 13 3		
Losses on mines abandoned to same period	30,491 13 0—153,365 0 3		
Dividends paid to shareholders up to June, 1847	150,500 0 0—	2,865 0 3	
		£142,865 0 3	
Add balance of profit for half-year, ending July 1, 1851		422 1 6	
Total receipts		£143,287 1 9	
The expenditure, cost of mines in operation, farms, hours, &c.		£111,389 4 6	
Mineral produce in hand		22,957 1 0	
Available funds		5,672 13 8	
Mining materials in stock		647 6 6	
Advances for purposes to be accounted for		1,349 4 7	
Ditto to agents, on account of next month's payments		162 12 5	
Debts due to the company	£ 3,781 8 11		
Audley securities, interest at 5 per cent.	14,578 10 11		
Total	£18,359 19 10		
Less debts due by the company	17,251 0 9—	1,108 19 1	
Total		£143,287 1 9	

At East Wheal Reeth bi-monthly meeting, on Thursday, there were not two opinions as to the value of the mine, from which great things are confidently expected, but general dissatisfaction was expressed at the loss of time, and the consequent injury to the shareholders occasioned by the non-completion of the engine according to the contract. The agreement with the engineer was, that it should be complete and ready to go to work on the 12th May last, and two months having elapsed since, the meeting they have expressed their determination to enforce the penalties against the contractor, for had the engine been ready at the time specified it is believed they would now be raising quantities of ore, and the shares have been at a high premium. So strong was the feeling on this subject, that the meeting was adjourned till the 24th inst., in order to secure a full attendance of shareholders, to determine on the course to be adopted.

At the East Birch Tor Tin Mining Company's special general meeting, on Monday, James Baker, Esq., in the chair, resolutions making certain alterations in clauses 117 and 119 of their Deed of Settlement were unanimously agreed to. [The report will be found in another column.]

At the first meeting of Wheal Zion adventurers, on the 26th June, it was found that the 2155 new shares were all taken up and paid upon, and a call of 5s. per share was made on the 1941 original shares, to equalise them with the new issue, payable on the 7th August. Since the meeting, a rich course of copper ore, from 18 to 20 in. wide, worth from 12*l.* to 14*l.* per ton, has been cut near the middle of the north champion lode in the 13 fathom level, at which depth the lode is 15 feet wide; this level is now driving on towards the south champion lode, which is about 6 fms. from the north champion lode, with a small lode of 2 ft. wide between them. All the underground works, with the buildings, are progressing satisfactorily.

At Wheal Violet meeting, on Saturday, the accounts showed—Balance last account, 73*l.* 6s. 10d.; four months cost end May, 174*l.* 11s. 8d.= 247*l.* 18s. 6d.; less call received, 185*l.* 16s. 2d.: leaves balance to next account, 62*l.* 2s. 4d. The mine henceforth is divided into 512 shares, and a call of 7s. 6d. per share was made. The sump shaft is down to the 20, and a cross-cut driven south, which has intersected the tin lode 2 ft. wide, worth 8*l.* to 10*l.* per fm. The cross-cut is extending away towards the copper lode, several small strings of which have been passed through. The ground is quite of a mineralised character.

At the Peter Tavy and Mary Tavy Consols two-monthly meeting on Tuesday, which was numerously attended (Henry Gibson, Esq., in the chair), the reports from the mine were read, and gave general satisfaction to the shareholders as to their future prospects. The stamps, it was stated, would be completed by the beginning of October. The balance in favour of adventurers was 820*l.* 4s. 6d.

At North Wheal Buller quarterly meeting, on Tuesday, the accounts showed—Balance last account, 1052*l.* 14s. 2d.; less expended during the quarter, 966*l.* 16s. 2d.: leaves balance to next account, 85*l.* 18s. A call of 1*l.* per share was made. King's shaft is down about 26 fms.; the lode in the shaft is 3 ft. wide, with spots of yellow copper ore, prian, peach, and gossan, underlaying north 1 ft. in a fm., in a fine killas stratum—the shaft is now sinking on the diagonal. Louisa engine-shaft is sinking below the 36, in a highly mineralised stratum of elvan, which the miners call granite, and it has that appearance. The lode in the adit end is 3½ feet wide, producing rich stones of copper ore. The prospects altogether were considered highly favourable.

At Warleggan Consols meeting on Tuesday, the accounts showed—Balance last account, 57*l.* 12s. 4d.; calls received, 123*l.*; sundry receipts, 31*l.* 5s. 7d.=211*l.* 17s. 11d.—Costs for April, 133*l.* 4s. 11d.; secretary's salary and expenses, 9*l.* 9s. 4d.: leaving balance to next account, 69*l.* 3s. 8d., besides 56*l.* 6s. 2d. for tin sold the 27th June. A call of 2s. 6d. par share was made. The engine-shaft is down 22½ fms. from surface; the wall is up ready to receive the wheel; 200 fms. of water-courses prepared; the north pitwork brought to surface, and ready to fix on the south; surface rods almost finished; and two small parcels of tin have already been disposed of. The ground in the shaft is hard, but as it deepens, and gets nearer the lode, a favourable change is expected.

At Lewis Mine setting, on Monday, the tributers took five pitches in new ground, on Praed's lode, at an average of 6s. in 1*l.* The ends in the 20 east and west are looking well.

At North Wheal Basset, in sinking a winze below the 72 fathom level, they have met with a splendid lode, 5 ft. big, about 12 fms. east of the new shaft. The shaft turns out as before; the lode is 4 ft. wide, yielding ore of fine quality. Nearly 200 tons of ore have already been extracted in sinking the said shaft.

At West Basset they are in fork to the 50 fm. level, and the sumpmen are cutting ground, to fix the plunger-lift down to the 75. The lode in the 30, west of the cross-course, on the north lode, is 3 feet wide. The south lode in the 40 is 2½ ft. wide. The 50 east is 2 ft. wide. The back of the 30 is working on tribute; one pare sent up 3 tons of fair quality ore on Monday.

Calstock United directors have furnished their report. The steam stamping and drawing-engine is in full operation—24 heads at work. The burning-house for calcining the tin is nearly completed, and a large quantity of tin that has been cleaned is ready for the ovens, and will soon be in a fit state for the market, when the profitable results anticipated are likely to be realised. The mundic or south lode yields abundantly. A contract has been entered into for the supply of arsenical mundic with Mr. Ponsford Fisher, of Plymouth, for a term of years, who is erecting extensive works on the sett for the manufacture of arsenic, the company retaining all the residium. They have other contracts for the monthly supply of this article. An extension of ground south has been granted by the Duchy, at 1-20th dues, for 21 years. The annual meeting will shortly take place

We understand the whole of the 1024 shares have been appropriated in the Wheal Catherine silver-lead sett.

Mr. Evan Hopkins, C.E., having been specially instructed to inspect the North Tamar Silver-Lead Mine, his report, which is inserted among our "Mining Correspondence," will be read with much interest. At the shallow depth of only 10 fms. they are raising ore, according to a sample recently assayed, worth 40*l.* per ton. It is exceedingly rich for silver, the assay having proved at least 75 ozs. per ton. This sett, it will be remembered, adjoins on the south, and is parallel with, the Great Tamar Silver-Lead Mine—9600 shares, present value about 60,000*l.* Mr. Hopkins, we understand, will be happy to furnish any additional information which may be required.

At Treville Silver-Lead Mine, they have cut into the lode in the 22 fm. level, embedded in a very fine soft killas; it is 7 feet wide, with a very flattering appearance; the end is approaching towards the high backs of rich gossan, under which they expect to find the lode very productive. The engine-shaft is sinking by six men at 7*l.* per fm.; and the 22 south is driving by six at 42s. 6d. per fathom. The machinery works well, and the water is kept at six strokes per minute.

We are glad to perceive that Mr. Richard Tredinnick succeeded in annulling his bankruptcy on Saturday last, the creditors having accepted an arrangement whereby they will be paid in full. He has resumed business with every prospect of a favourable result. He has two or three new mines west of Camborne on the *tapis*, which will shortly appear before the public.

The new bill for the Copper Miners' Company was argued in the House of Lords on Wednesday, when the several clauses were gone through, and the preamble declared proved. The committee were of opinion that the opponents of the bill had no *locus standi*.

Transactions have taken place in Spearne Consols, Bedford United, Alfred Consols, Tremayne, St. Aubyn and Grylls, Wheal Providence, Arthur, Merllyn, Cook's Kitchen, Bodmin Consols, Carvannal, Trelawny, Mary Ann, Margaret, South Tamar, Tincroft, East Leisure, Garreg, Wheal Tom, Trefusis, Wheal Violet, and Vincent.

Inquiries have been made for Devon Great Consols and Kenmare.

At the annual general meeting of the Royal Santiago Mining Company, on Wednesday (of which there is a full report in another column), the accounts showed the expenditure in the half-year ending 28th February as 10,547*l.* 17s. 6d.—Copper ore sold, 1918*l.* 5s. 9d.; precipitate, 962*l.* 12s. 8d.; estimated value of ore on board the *Sir Isaac Lyon Goldsmid*, 2030*l.*; other assets, 218*l.* 7s. 6d.: showing loss, 5418*l.* 11s. 7d. Advices had been received from Capt. Treweek up to the 3d June, which are of a more favourable nature than for a long time past. At San Joaquin, Taylor's shaft is down 16 fms., and when communicated with the winze from the 10 by another level, the sampling of copper ore will considerably increase. The lode in the winze is from 4 to 5 ft. wide, yielding 7 tons of copper ore per fm. The 10 west yields 4 tons per fm. The directors recommended the resumption of operations at the St. Andrew Mine. The Sanctuary ground lode, not many fathoms from the boundary, is yielding large quantities of ore; and by sinking the Victoria shaft from 20 to 50 fms. deeper, it is probable the lode (cut off by a cross-course) may be regained. A more powerful engine, of 50 or 60-in. cylinder, will be erected, and a considerable number of Cornish miners engaged and sent out, so as to prosecute the necessary work with the utmost vigour. The available capital of the company being inadequate, a call of 2*l.* per share will forthwith be made, to be payable on or about the 15th Sept. The estimated expense appeared to be—new engine, &c., 4000*l.*; cost of sinking and exploring, 6000*l.* The call would produce 14,000*l.* The report was unanimously adopted, Ald. Thompson, M.P., re-elected a director, and Mr. Jerningham an auditor.

United Mexican advices have arrived to the 28th May. Raipas has decidedly improved in produce and quality, and if present prospects continue increased extraction may be looked for, as the vein presents a more formal appearance than it has in any point for 100 varas driving. The stoppage of Barrera hacienda for want of water has induced the manager to dispose of the surplus ore. The returns for April were $17,940 1 2. At Jesus Maria y Jose they expect to cut the vein daily. All the stores have been removed from Promontorio, and the mine delivered to the owners. At Trinidad the expenses had been reduced one-half. The price of forage continues high. During the last five weeks the average number of barmen employed, day and night, has been 78, and the produce of dressed ore to the haciendas 2850 cargas.

From the Linares Mines, advices have been received up to 28th June. The 55, west of Wilson's, is worth 1½ ton of ore per fm., though troublesome for driving; eastward, on the north side of the lode, it yields 6 tons per fathom. The 54, west of San Juan, turns out 1¾ ton of ore per fm., and the branch about ¾ ton. Shaw's shaft will take two months longer to get down to the 55. Nine pitches are at work by 40 men, at the usual average tribute; and the quantity estimated to be raised in July month is 166 tons of ore, including the slimes from the dressing-floors. Lead ore weighed in, 36 tons; in stock, 1060 tons. Pig-lead weighed in, 22 tons; in stock, 104 tons.

The Annotto Bay Mining Association have received further advices by the West India packet, from Mr. Montgomery Martin, dated Jamaica, 8th June. Mr. Martin states that the lode referred to in his last report has now been opened along the side of the mountain to the extent of 60 yards, exhibiting a very rich deposit of ore. In blasting, several stones of upwards of half a ton have been taken out, and which, on being broken, are found to be almost pure copper. These operations are to be continued with every possible activity, and great hopes seem to be entertained that the mountain will be found to be almost one mass of metallic deposit.

Advices from Valparaiso, under date the 8th May, state that the mines of Copiapo were unusually productive; that of Buena Esperanza is considered the richest silver mine in the world.

In another column will be found two letters, from Lake Superior and California, containing some interesting particulars respecting the reputed wealth of those countries.

A valuable gold mine has been discovered at a point equi-distant, or nearly so, between Tunis and Algiers. The French and the Bey of Tunis equally claim it, and some very sharp letters on the subject have passed. Unless matters can be adjusted, a serious disturbance may probably result.

At Amsterdam and Rotterdam the tin market is inactive, parties awaiting the great sales, which commence on the 5th proximo.

The London imports of the week comprise—from Rotterdam, 49 casks plumbago; Ceylon, 233 casks plumbago; Antwerp, 137 barrels 12 cases zinc, 30 casks 24 cases spelter, 96 casks spelter nails.

At Liverpool—from Valparaiso, 1261 barrels 907 casks of copper ore, 620 bags of silver ore, 541 bags mixed ore, 546 bags mixed regulus, 475 barrels copper; Hamburgh, 10 casks manganese; Rotterdam, 410 tons 69 casks manganese; Dordt, 178 tons manganese.

At Hull—from Hamburgh, 26 casks cobalt ore, 2097 plates of spelter; Stockholm, 26,083 bars iron; Stettin, 748 plates spelter; Cronstadt, 588 bars iron; Antwerp, 43 bars zinc; Gottenburg, 1214 bars iron; Petersburg, 597 bars iron; Rotterdam, 135 bars steel iron.

Very little business has been done in bank shares this week, but prices are firm. The sales comprise—Australasia (40*l.* paid), 34½; Provincial of Ireland (25*l.* paid), 43, 42½, ex. div.; Union of Australia (25*l.* paid), 35, 36½; Union of London (10*l.* paid), 13¼.

Dock shares are unaltered, except Southampton Dock, which command a better price. Quotations stand as follows:—Commercial, 84; East and West India, 144; London, 112, ex. div.; St. Katharine, 77; Southampton, 17½.

In steam-boat shares there has been a fair extent of business at about former rates.—General Steam Navigation have been marked 27½; Peninsular and Oriental, 69, 70, 69½, ¾, ½, ex. div.; ditto New (5*l.* paid), 6½, ½; Royal Mail Steam, 76½, 76.

Prices of insurance shares have undergone very little change, as will be seen from the subjoined list of the quotations at present ruling:—Albion, 86; Alliance, British and Foreign, 21⅝; ditto, Marine, 37⅝; Atlas, 17⅝; British Commercial, 7; Church of England, 2⅝, 3; Clerical, Medical, and General Life, 20; County, 80 ex. div.; Crown, 15; Eagle, 6½; Equity and Law, 5; English and Scottish Law Life, 2½; European Life, 12; General, 5½; Globe, 136; Guardian, 56½; Imperial Fire, 245; Imperial Life, 18½; Indemnity Marine, 50½; Law Life, 3; Law Life, 46; Legal and General Life, 4½; London Fire, 19; London Ship, 19; Marine, 16; Monarch, 1 ex div.; National Loan Fund, 2½; Phœnix, 156 ex. div.; Professional Life, ⅝; Provident Life, 30; Rock Life, 6½; Royal Exchange, 221; Sun Fire, 209; ditto Life, 48; United Kingdom, 4; Victoria Life, 5, 5½.

Shares in the General Reversionary and Investment Society are worth 92 to 63; Equitable Reversionary, 109⅛; Reversionary Interest Society, 100½ ex. div.

Miscellaneous shares are quoted as follows in the official list:—Assam Tea Company, 8; Australian Agricultural, 15; Australian Trust, 20; Anglo-Mexican Mint, 25; Canada Company, 47, 48, 49; ditto Five per Cent. Bonds, 95¾; Hudson's Bay Stock 205; Price's Patent Candle Company, 23; South Australian, 24¾; Van Diemen's Land, 1⅞.

PETER TAVY AND MARY TAVY.—At the two-monthly meeting, on Tuesday (which was remarkably well attended), a general feeling prevailed as to the ability and energy displayed by the chairman of the committee (Henry Gibson, Esq.), in the strenuous manner in which he has exerted himself in promoting the interests of the company, and considerably assisting in bringing the mine into the present highly promising position. Indefatigable as that gentleman appears to have been for the best interest of the company, there has evidently been some feeling of petty jealousy manifested by a shareholder or two, who, probably envious of the merit so laudably earned, have endeavoured latently to agitate a movement which has recoiled on themselves, to their great mortification.

SHEPHERD AND BUTTON'S SUB-MARINE TELEGRAPH.—We mentioned, a short time since, that Messrs. Shepherd and Button, of Holborn-bars, had invented and patented some very important improvements in the sub-marine telegraph, and we have now, after having seen a model, and learnt every particular from the inventors, to state that the invention promises well both for simplicity and efficiency, the great feature being that the wires are applied to the common mooring chain, by placing them in the angles thereof, and secured thereto by proper clasps and fastenings, the electric wires being first coated with gutta percha and other substances, in a manner suitable to afford protection against the sea animals and contingencies; the wires are then cased in a metallic casing, termed by the inventors their electro-marine line, and secured to the chain, each line being capable of holding several wires, so that one chain can be employed for 30 or 40 wires. Another feature of the invention consists in fixing a series of testing boxes at intervals throughout the line of telegraph, and to these testing boxes buoys are attached, supporting the chain, &c., throughout the whole length of telegraph, so that whenever any defect occurs it will be easy to get at the point where the necessary reparation is required to be made. The inventors have also provided a plan of securing the chain by wires to the sea shore, and have patented other arrangements for rendering the sub-marine telegraph capable of being carried into actual execution.

SWANSEA DOCKS—LIABILITY OF SHAREHOLDERS.—An action was brought by the Swansea Dock Company against Mr. Abraham Levien to recover the amount of a call of 8*l.* per share on 15 shares, together with interest of 5*l.* per cent. per annum, from March, 1848. He denied that he was the holder of the shares, and pleaded that the call was not made by any persons having authority on behalf of the company to make it. The case was first tried at Croydon, before Lord Chief Baron Pollock, at the summer assizes, in 1849. At his strong recommendation, the facts were embodied in a special case, to be submitted to the judgment of the Court of Exchequer. On the 6th of June last, the case was argued before the full court—Mr. Peacock, Q.C., and Mr. Phipson being council for the plaintiffs, and Mr. Bovill for the defendants. After hearing the arguments on both sides, the court took time to consider their judgment, and this has been given in favour of the plaintiffs—thereby establishing the validity of the call made by the company on 15th Feb., 1849.

LEAD ORES

TICKETINGS FOR ABOUT 100 TONS LAXEY LEAD ORE.

Bidders. *Douglas, Isle of Man, 5th July.*	*Price per Ton.*
Mather and Co. (purchasers)	£17 17 0
Walker, Parker, and Co.	17 10 6
Newton, Keates, and Co.	16 18 0
John P. Eyton	17 13 6
Sims, Willyams, Nevill, and Co.	17 11 6
Thomas Somers	15 6 6
Tamar Smelting Company	17 5 6
Pontifex and Wood	15 13 0
Locke, Blackett, and Co.	17 2 6

Sold at the Mine, on the 4th July.

Mines.	*Tons.*	*Price p. Ton.*	*Purchasers.*
Driggith	12	£13 0 0	Locke, Blackett, & Co.
ditto	8	6 15 0	ditto

Sold at Liskeard, on the 9th July.

Wheal Mary Ann	53	£22 6 6	T. Somers.

Ticketings at the White Horse Hotel, Holywell, 10th July.

Maesyrerwddu (Talargoch)	29½	£11 11 0	J. P. Eyton.
ditto ditto	40½	11 1 6	Walker, Parker, & Co.
Coetia Llys ditto	10	12 8 0	ditto
Hendre	20	10 10 6	J. P. Eyton.
ditto	5	10 9 0	Walker, Parker, & Co.
Deep Level (Holkin)	70	10 13 6	ditto
Talacre	15	11 18 6	ditto
ditto	15	11 18 6	J. P. Eyton.
Lloc	12	11 9 0	Newton, Keates, & Co.
Merllyn	30	11 8 0	J. P. Eyton.
Strontian	25	11 0 0	Newton, Keates, & Co.
ditto	25	11 0 0	Walker, Parker, & Co.
Black Craig	44	9 15 6	Newton, Keates, & Co.
Cairnsmore	40	10 4 0	ditto
Newtonards	40	10 13 6	ditto
Eagle Rock	18	9 18 6	Walker, Parker, & Co.
ditto	3	11 12 6	Newton, Keates, & Co.

BLACK TIN

Sold at the Mine, on the 4th of July.

Mine.	*Cwt. qr. lbs.*	*Price p. Ton.*	*Purchasers.*
Wheal Trescoll	6 2 12	£61 0 0	New Blowing-house.
ditto	4 0 12	52 0 0	ditto
ditto	3 2 0	44 10 0	ditto
Amount of sale		£38 12s. 3d.	

Mine.	*Tons.*	*Price per Ton.*	*Purchasers.*
Drake Walls	5½	£47 15 0	J. H. Enthoven & Co.
ditto	2½	40 10 0	ditto

COPPER ORES.

Sampled June 25, and Sold at Andrew's Hotel, Redruth, July 10.

Mines.	*Tons.*	*Price.*
Carn Brea	122	£4 19 0
ditto	103	6 7 0
ditto	79	4 17 6
ditto	65	4 5 6
ditto	59	6 7 0
ditto	54	8 16 6
ditto	53	7 17 6
ditto	50	4 16 0
ditto	40	2 1 0
Wheal Buller	94	5 16 9
ditto	90	6 8 0
ditto	74	6 18 0
ditto	70	4 6 6
ditto	58	4 6 6
ditto	47	4 8 6
ditto	37	2 6 0
Tywarnhayle	92	3 10 6
ditto	84	2 11 6
ditto	52	8 0 0
ditto	39	3 0 6
ditto	30	4 0 6
ditto	25	2 13 6
Par Consols	102	6 5 0
ditto	87	8 2 0
ditto	67	6 18 6
Par Consols'	57	£8 7 6
Alfred Consols	79	6 7 0
ditto	58	5 13 6
ditto	53	5 17 0
ditto	21	13 9 6
East Wh. Leisure	85	1 13 6
ditto	62	3 19 6
Wh. Tremayne	56	2 9 0
ditto	36	1 18 6
ditto	27	4 10 0
Levant	44	8 3 0
ditto	43	1 6 6
ditto	8	39 0 0
Wheal Agar	36	4 6 6
ditto	34	7 8 0
Cook's Kitchen	58	4 2 0
ditto	4	25 3 0
ditto	1	10 19 0
St. Ives Consols	34	5 10 6
ditto	1	46 2 6
W. Wh. Providence	33	11 2 6
Trannack and Bosence	25	6 16 0
Respryn	9	8 0 0
ditto	4	3 0 0

TOTAL PRODUCE.

Carn Brea	625	£3511 10	6	Wheal Agar	70	£407	6 0
Wheal Buller	470	2478 9	6	Cook's Kitchen	63	349	7 0
Tywarnhayle	322	1262 4	0	St. Ives Consols	35	233	19 6
Par Consols	313	2283 11	0	W. Wh. Providence	33	367	2 6
Alfred Consols	211	1423 16	6	Trannack and Bosence	25	170	0 0
East Wh. Leisure	147	388 16	6				
Wheal Tremayne	119	328 0	0	Respryn	13	84	0 0
Levant	95	727 11	6				

Average Standard £99 14 0 | Average Produce 8¼
Average Price per ton £5 10 0
Quantity of Ore 2541 tons | Quantity of Fine Copper, 210 tons 13 cwts.
Amount of Money £14,015 14 6
LAST SALE.—Average Standard £100 12 0.—Average Produce 8¼
Standard of corresponding sale last month, 100*l.* 9s.—Produce, 8.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	139	£842 18 9
Vivian and Sons	415	2161 10 3
Freeman and Co.	339	1728 2 0
Grenfell and Sons	344	1891 12 3
Sims, Willyams, and Co.	331	1575 2 9
Williams, Foster, and Co.	616	3787 18 0
Schneider and Co.	173	967 13 6
Mason and Elkington	184	1060 17 0
Total tons	2541	£14,015 14 6

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria 1609—West Caradon 309—Wheal Friendship 227—Fowey Consols 205—Bedford United 141—Poldice 100—Callington Kelly Bray 100—Wheal Busy 51—Tamar Slag 35—Wheal Crebor 34—Wheal Malden 20—Wheal Jewel 11.—Total, 2842 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Perran St. George 700—United Mines 488—Consolidated Mines 459—Trevlakey 383—Par Consols 286—South Caradon 203—South Tolgus 155—Trethellan 70—Treleigh Consols 70—Wheal Ellen 68—Wheal Mary (Redruth) 40—Wheal Clifford 34—Wheal Vyvyan 30.—Total, 2986 tons.

COMPARATIVE AVERAGES OF THE WEEKLY SALES OF COPPER ORES FOR NINE YEARS—SECOND SALE FOR JULY, 1851.

Years.	*Tons.*	*Produce.*	*Amount.*	*Standard.*	*Cop. Ore.*	*Price Cake Copper.*
1842	2196	6¾	£ 9,676 8 6	£108 7	£67 13	£89
1843	2986	8	16,788 13 6	105 5	70 14	82
1844	2921	6¾	13,012 11 6	107 3	66 6	83
1845	3205	7¾	18,254 5 6	107 18	72 15	88½ to 91½
1846	2289	8¼	12,155 6 6	98 13	65 0	93 to 96
1847	2386	8¼	14,184 19 0	105 10	72 2	98 to 101
1848	2372	9¼	11,039 11 0	80 2	54 19	88½ to 91½
1849	2538	8¾	13,913 5 0	94 9	62 18	79½
1850	2490	9¼	15,395 2 6	97 14	67 13	84

At SWANSEA, for Sale July 15.—Beerhaven, 559—Cobre, 242—Kaw-aw, 168—Tungkillo, 78—Creetown, 47—Lackamore, 43—Burra Burra 20.—Total, 1257 tons (21 cwts.)

NOTICES TO CORRESPONDENTS.

"Enquirer" (Hastings).—We think there can be no doubt but the works in question must be considered a quarry, and liable to be rated. The distinction between a mine and a quary is not founded on the difference of the substance raised, but of the mode of obtaining it—workings open and visible from surface being deemed quarries, while sinking shafts, driving levels, and generally digging *under* ground, appear to be the features of mining.

"Cornubiensis" shall be replied to shortly.

"A Dissatisfied Shareholder" (Lincoln).—We should recommend our correspondent to write to the manager, in a more temperate tone than he wishes to address him through our columns, and we have no doubt he will receive a satisfactory reply. He should recollect that the directors, being shareholders as well as himself, are equally interested in the welfare of the company.

"K. W." (Cheshire).—We are obliged for the communication, and shall not forget its contents.

"J. E. M." (Queen's Town) writes—"Comparatively, mining is only in its infancy as yet in this country; it would have been more profitably extended, only for the very bad selection made of those persons sent as pioneers or explorers: they were, in several instances under my own cognisance, lavish of the funds at their disposal—at once assumed the airs of directors instead of servants—they were ignorant of the country and its language—they spent their time idly, and suffered those few they set to work (a larger number being generally charged for) to do as little as they pleased. A specimen of good ore was produced from somewhere else, and then sent to the company with a *bouncing* report!"

"A. A." (Leith).—If the copper slag is foul, and contains metal enough to pay smelting and other charges, a purchaser will no doubt be found in Swansea. The agents at Newport should advise the smelting agents on the arrival of the cargo.

"Adventurer" (Bishopsgate).—All disputes respecting mines, if out of the jurisdiction of the Stannaries of Cornwall, the Barmote Courts of Derbyshire, or other local liberties, must be settled by appeal to the common law courts, or a bill filed in Chancery.

"X." (Yarmouth).—We shall be obliged for the information offered—we are always ready to publish authenticated details of interesting discoveries.

Inclines on Canals.—Sir: I shall feel obliged if any of your correspondents will inform me if there is any canal on which an incline is used with advantage, and the method adopted for the transit of the boats.—C. C. C.

"F. W." (Clifton).—We have no information beyond what has appeared in the Journal respecting the Brimpts Mine, near Lydford;—perhaps the parties interested will forward a notice of the sett.

"A Subscriber" (Derby).—A letter sent to our office, addressed to Mr. Bessemer, patentee of the "Process for Consolidating Small Coal," will be forwarded.

"A Shareholder" (Bath).—We have no means of ascertaining such particulars. The secretary will supply all the information in his power, and to whom application should be made.

California.—Sir: Many of your readers being interested in the affairs of California, I enclose an abstract of a letter just received from San Francisco, which may be worth inserting, as showing the place is not considered a "bed of roses" by those residing there:—"The recent fires having awakened a desire, as far as possible, to prevent their recurrence, a great meeting has been held, to consider the best means to effect that object. A difficulty, however, appears to exist as to the parties to be selected; among a multitude of propositions, one was that watchmen should be appointed to guard the city; but this was objected to by Mr. Long, who suggested that a secret society should be formed to watch the city, and to watch the city police. In the course of his professional practice, he had learned that the cities of California contained the most damnable set of villains on the face of the earth, and the most artful and cunning. If a committee were appointed, on becoming known, they would be marked and shunned, and the rascals would treat them as they do the city watch—wait till their backs were turned to do their work."—A Reader: *July* 10.

"Enquirer" (Leeds).—The papers on the Public Works of England appeared—that on Lighthouses on the 2d June; on Canals on the 16th and 23d June; and on Docks on the 11th August, 1849.

"R. W." (Regent's Park).—The office of the Cardiganshire Mining Association is 32, Great Winchester-street, City. The property has been surveyed and reported on by Messrs. J. H. Hitchins and N. Ennor, and we have every reason to believe the parties connected to be highly respectable.

We have received several communications referring to the case of "O. P.," in last week's Journal, but generally of a nature which unfits them for publication—personal attacks on private persons. Similar grievances appear, unfortunately, to be numerous, but the public, in some instances at least, would consider that the parties had almost sought their present dilemma, by undue precipitancy in an endeavour to acquire wealth. Any letters addressed to our office for "O. P." will be forwarded.

"A Tourist" (Ruabon).—We shall be glad to receive the communications, especially those from Ireland.

Sir: In reply to the inquiry of "W. W." (Liverpool), I beg to say that, if he feels interested in the Killeen and Glenaulin mining property, and will send his address to the *Mining Journal* office, every desired information shall be forwarded to him through the same channel. The mines are situated on the south side of Bantry Bay, opposite to the celebrated Berehaven Mines, in Ireland, and are now in a state of the most promising working. According to the last report, published in your Journal of 21st June, the great lode was then cut through, and ascertained to be 18 feet wide, having copper ore intermixed with the matrix throughout its entire width. The most confident expectations of speedy returns and productive mines are, therefore, reasonably entertained.—S. S.: *London, July* 10.

The Mineral Vein Question.—Sir: I shall feel obliged if your correspondent, Mr. R. Symons, Truro, will substantiate the charge preferred in his letter of the 1st inst., by quoting from my papers *any one expression* that will bear even the interpretation of "personality," or that is in the slightest degree discourteous; or any opinion or deduction I have ventured on proposing, without at the same time giving the facts or premises. There is nothing more easy than to lump with "others" an individual who stands completely alone. If the "crystalline doctrine" requires for its support any such disguised prop as that afforded by Mr. Symons, its tottering structure must ere long form an addition to the heap of ruins, the remains of "heat," "cohesion," "diffusion," and other dogmas, which "Electrical Condition" has laid prostrate in not more than six years.—Franklin Coxworthy: *Canterbury-place, July* 7.

Sir: Being a reader of your valuable Journal, it is with pleasure I watch its rising progress. Its readers are in the right road to obtain valuable knowledge in all the arts and sciences that support and keep up the wealth of the far-famed British nation. I have long admired the writings of many of your able correspondents. There was a time when I thought none more interesting than those from "Argus," of Truro. Seeing it remarked a few weeks since, that if he ("Argus") was not on his guard, Mr. Symons would put out all his eyes, I felt rather annoyed at the result, little thinking Mercury was so near at hand, with his arm raised to strike a deadly blow. When on a special guard, I thought him far more able to defend his trust. Should he be turned into a peacock, and gifted with its naughty tricks, he will not prove over profitable to his fostering lord, who will only keep him concealed to gratify his own eye with a peep occasionally at his pretty tail. We passers-by are not favoured with a sight of the head of the pretty bird, fearing we might recognise him as once being able to do the trick of trade, but he sends us the bewildering sound or weakly cry of the calamities that will befall the inhabitants around the 41 dividend-paying mines at the explosion that will shortly take place. When called on to favour us with a sight of his hundred-eyed tail, to amuse and draw off our attention while the deadly fire burns for our destruction, he says—"No: I will retire under the shield of Ajax." In that case I would most expressly remind him, that if the public once thought him the Prince of Writers, he has of late fallen so low as to be thought unworthy of their valuable reward—the arms of Achilles. Should he feel the sting so keen as to commit the rash act of him whose shield he takes shelter under, he may not be so fortunate as to be turned into a violet, fearing he will not favour us with a delicious smell. "Argus," certainly, lowered himself, when writing under that signature, by indulging in personality—whatever might have been his opponents' remarks, his shield protected him. His letter of the 16th June, wherein he indulges in personal, and even insulting, remarks, and then calling on the Editor to withhold the keen arrow so truly aimed at him, shows him clearly to be unworthy of the noble arms of Achilles. He had better assume the signature of "Aristomenes."—*Portsea, July* 8.

Some remarks on Dr. Frankland's report on White's Patent Hydro-Carbon Gas—the Proceedings of the British Association—Brown's Patent Blooming Machine—and some miscellaneous papers, are unavoidably postponed.

Mr. J. Y. Watson's Compendium of British Mining will be resumed in our next.

The Cost-Book System.

Having repeated applications for particulars respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsman, or at our office, price 6d.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—

To the Editor,
Mining Journal Office,
26, Fleet-street, London.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JULY 12, 1851.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

On the 10th of August, 1850, the Mines and Collieries Act received the Royal Assent. In the year ending Dec. 31, 1850, the total of deaths from accidents in mines and collieries were 632, while the injuries were 273. We are happy to record that during the past half-year a considerable diminution has taken place in these fearful occurrences—the total amount of deaths being 290, which is thus subdivided:—75 explosions, 96 falls of roof, 24 falls in shaft, 44 accidents by machinery, and 51 accidents not specified. The injuries have been 110;—those from explosions 61; fall of roof, 20; fall in shaft, 4; machinery, 11; and accidents not specified, 14—making a total of deaths and injuries of 400. Although this is a great number, yet it must be a matter of congratulation that it is so much beneath the usual annual average. As we anticipated, the appointment of inspectors has done much good, and we are convinced that, had they a sufficient and competent staff, the ratio of these disastrous accidents would sensibly decrease. In Cornwall and Devon, where the rocks are of the older formations, the occurrences are few and far between—the strata of the country not requiring the timbering which is requisite in districts where coal is worked; nor are the copper mines subject to those explosions of carburetted hydrogen, which are a source of danger in our collieries. This is, however, solely confined to carboniferous deposits, which do not exist in Cornwall, and, consequently, are unknown there. On looking over the numbers, it will be found that, though the explosions have greatly decreased, the falls of roof, and the accidents by machinery, have considerably increased; and if we were to adopt an hypothesis, it would be seen that while ventilation has been regarded—from the neglect of which so many frightful accidents have happened—other causes have been disregarded. The inspectors appear, to our thinking, to have indefatigably worked, as far as their limited means would allow. They are too few; their duties are two multifarious to admit of their performing any real practical benefit to the men whose lives are under their supervision. Never was there a more insufficient bill than that of the Mines and Collieries produced by the present inane Ministry. It is too late in the present session to endeavour to amend it. We must hope we shall have a practical measure, which shall be more comprehensive in its workings, and more extended in its details, when we shall be so fortunate as to have men at the helm of State who regard the claims of the working miner, collier, and the whole of the operative class, who will proceed with the times, and not make their own *dictum* "a nation's finality." Legislation will, however, be of no avail, unless the miner chooses to protect himself against his own rashness. Many of the explosions that have occurred during the past half-year have arisen from the simple circumstance that naked candles have been used where the safety-lamp was indispensably necessary. Other causes can be traced to the obstinacy and ignorance of the labourer. It becomes, therefore, a greater duty for the viewer or captain to exercise not only a watchful superintendence over the mine or colliery, but likewise over the labourer. The Legislature has yet much to do, and is answerable for many "sins of omission." If the superintendent and operative exercise due discretion, many "sins of commission" may be avoided.

In connection with this subject, it will not here be inappropriate to allude to the late accident which occurred at Mr. George Dudley's pit, at the Five Ways, Cradley, whereby nine unfortunate persons were precipitated into eternity. The inquiry was attended by Joseph Dickinson, Esq., the inspector, who, after hearing the evidence adduced on the inquest, expressed himself satisfied with the manner in which the pit was worked, and the good order in which the gate-roads and air-heads had been kept, at the same time recommending that the ventilating fire should be kept in during the summer season. It was at first erroneously supposed that this calamity had arisen whilst trying the workings with the lamp. This, however, was not the case. It appears that one of the sufferers (Holt), the doggy, had to descend in the colliery to the first band, to try the pit as to the presence of gas, previously to its being entered. From the evidence, it appears that this man was, unknown to the owner, in the habit of employing a deputy; further, that if the lamp had been properly tried, no explosion could have happened—every witness stating that the accident would not have taken place if the doggy had made an examination with the lamp, and the following verdict was returned by the jury:—"That deceased came to their death by an explosion of fire-damp, caused by the culpable negligence of the doggy of the pit, in not examining the workings before the workmen entered."

The remarks we have so often made, that it is impossible for any legislative enactment to protect the operative from danger, unless some stringent rules are laid down to secure him from the consequences of his own ignorance, temerity, and carelessness, are here fully borne out. Here were nine people, some married, with others dependent on them, by the carelessness of one of their comrades—who fell himself a victim to his own want of caution, suddenly—by a fearful death, snatched away, leaving their families unprovided for. Accidents from the same causes, entailing great or lesser degrees of calamity, have occurred before, which, though they have excited attention at the time, have soon been forgotten, and recurrence has again been had to the same reckless way, which is persisted in until another fatal warning takes place, by which numbers are placed in mourning and poverty. We have before stated that, in our opinion, in every case the inspection, neither on the part of the Government or that of the owner, is sufficient to meet the exigencies for which it was required. No man should descend in any explosive atmosphere without his lamps being properly examined and tested by his superior; any omissions on the part of either overman or labourer should be punished with dismissal. This practised a few times would, we believe, cause an effectual cure of many of the consequences of rashness and ignorance. This may be thought, perhaps, too severe a sentence, but it must be borne in mind that in this case the offender is not only venturing his own life, but risking that of others, together with the means of subsistence for those who depend on their exertions, and probably causing such a wholesale destruction of property, that the energies of a district may become paralysed by the neglect of one foolhardy or careless fellow, as the case may be.

An important judgment has been given in the House of Lords on the hearing of the appeals "Norris v. Cooper," and "Hutton v. Thompson," under the Joint-Stock Companies' Winding-up Acts. In the first case Cooper had not paid the deposit, and in the second Thompson had done so, as required by the letter of allotment. The question was put for the opinion of the judges under the provisions of the 7th and 8th Vic., cap. 110, as to the persons who were provisionally registered as the promoters of a project, with a certain specified capital, to be divided into shares. Certain persons assumed to act as a committee, in that capacity allotted shares when applied for, incurred expenses, contracted debts to carry out their object; failing to do this the project was abandoned. It would then be seen whether these persons constituted an association or partnership within the meaning of the statute passed for the winding-up of joint-stock companies, or if it would make any difference if the committee who contracted the debts were less than seven in number. The judges, through the Lord Chief Baron, were of opinion that neither in the case where shares are allotted and upon which no payment of deposit has been made, nor in a case where the payment of the deposit has been made but no signature of the party to either the subscribers' or parliamentary contract been affixed, ought the name of the party to be included in the Master's certificate of contributories. The mere fact of the applicant being an allottee of shares under the circumstances set forth, assuming that he was an allottee, does not in any way make him responsible for any preliminary expenses incurred; this they believed was the law prior to the statute 7th and 8th Vic., cap. 110, and that none of the provisions of that Act make any alteration in the law in that respect, so as to render an allottee of shares liable for preliminary expenses, or to create a construction of law different to that which has hitherto been adopted. The Lord Chancellor thanked the learned judges, on the part of their lordships, for the consideration which they had given the questions that had been submitted to them, and which probably would save them the trouble of considering other questions of a like nature.

The opinion is here given so clearly that no one should be liable to be included in the Master's list, except those who have affixed their signatures either to the subscribers or the parliamentary contract, that we think much reckless speculation will be avoided, the spirit of gambling checked, and it will render provisional committeemen more cautious than they have hitherto been in their profuse allotment of shares to *Creti et Pleti*. The judgment will, no doubt, be hailed with great satisfaction by those interesting denizens of Boulogne, Ostend, &c., who have temporarily withdrawn themselves from the shores of Albion to avoid their liabilities; at the same time, it relieves them from an incubus which has been weighing on their adventurous industry for the last few years: it plainly tells them that they will not be able, on their return, to pursue so easily their nefarious occupations. Men of substance will be careful of giving their names to dubious speculations, or signing documents which may incarcerate them for years, and despoil them of the property they may have accumulated by honester and certainly less questionable means. The wholesome lesso r thus read by the highest authorities in the land will be the cause of checking that undue desire for gain, *per fas et nefas*, which has characterised almost every mania in this country, whether for South Sea Stock, canals, mining, or railways. That it has relieved many designing and fraudulent knaves there is no doubt, but at the same time it has checked their proceedings for the future, and we are convinced will realise the old adage, "that out of a little evil cometh much good."

We now present full particulars of the dividends made during the last half-year, both in British and Foreign mines, and it is pleasing to see that, as far as the 40 British mines and 3 foreign go, the result is of a highly satisfactory nature. We speak advisedly in saying that there is very little doubt that the ensuing half-year will prove equally as gratifying, the prospects at most of the mines being represented quite as promising and productive as for a considerable time past. The copper market stands firm, and the demand quite equal to the production. No real cause of fear exists as to the price of tin; in short, we look forward to an immediate advance after the Dutch sale of next month takes place. Lead is in fair demand, so that, as far as our produce goes, the British miner has no cause for alarm—on the contrary, he has a cheering prospect before him. Two-thirds of the mines upon our dividend share list have paid in the last half-year 118,450*l.* 16s.; and there are half-a-dozen or more that we anticipate will pay in the present half-year, besides the prospect of some of the rising concerns in our second list, making their appearance in the first class. As the advocate of British mining, when pursued in a fair and legitimate manner, we have frequently pointed out that, as an investment on a good solid foundation, nothing offered a greater advantage to the capitalist than mining, as a reference to the amount of dividends paid for a series of years on the 63 mines classed in our dividend mine share list amply testifies. In the foreign shares, it will be seen that the St. John del Rey have nearly repaid all their capital to the shareholders, and the mines are represented to be in as highly productive a state as ever. The General Mining Company (Nova Scotia) paid 10,000*l.* during the last half-year, and looks well to pay handsomely for the future. The Marmato Gold Mine (Columbia) will, at the next half-yearly meeting, make a further dividend, which will repay the shareholders the full amount of their outlay, with every prospect of realising handsome profits for years to come.

DIVIDENDS DECLARED DURING THE PAST HALF-YEAR.

Devon Great Consols—three dividends = 23*l.* per share, or ..	£23552	0	0
Wheal Buller—three for 65*l.*	8320	0	0
Carn Brea—three for 7*l.*	7000	0	0
Lisburne Mines—three at 20*l.*	6000	0	0
South Frances—three of 8*l.* (each 1984*l.*)	5952	0	0
East Wheal Rose—three of 15*l.* (each 1920*l.*)	5760	0	0
Wheal Basset—two at 10*l.*	5120	0	0
Alfred Consols—three for 19s.	4864	0	0
North Pool—three of 15*l.* (each 1500*l.*), is	4500	0	0
Treviskey—three for 33*l.* 10s.	4020	0	0
Wheal Mary Ann—two at 3*l.*	3072	0	0
Bedford United—three for 12s.	2400	0	0
Levant—three at 5*l.*	2400	0	0
Wheal Trelawny—two for 4*l.* 10s.	2340	0	0
Perran St. George—two for 1*l.* 15s.	2030	0	0
Wheal Golden—two at 5s.	2000	0	0
Wheal Seton—two for 10*l.*	1980	0	0
South Caradon—three at 2*l.* 10s.	1920	0	0
West Caradon—three at 2*l.* 10s.	1920	0	0
South Tolgus—three at 2*l.* 10s.	1920	0	0
Wheal Reeth—two for 7*l.* 10s.	1800	0	0
Wheal Tremayne—three for 1*l.* 15s.	1792	0	0
Spearne Consols—three for 1*l.* 15s.	1792	0	0
Great Work—two at 7*l.* 10s.	1785	0	0
North Roskear—three for 12*l.* 10s.	1750	0	0
Balleswidden—three for 16s. 6d.	1745	16	0
Wheal Lovel—two at 2*l.*	1720	0	0
North Basset—one at 5s.	1500	0	0
Lewis—two at 10s.	1000	0	0
Botallack—two at 5*l.*	1000	0	0
Providence Mines—two for 1*l.* 15s.	980	0	0
St. Ives Consols—two for 9*l.*	846	0	0
Wellington—two for 15s.	768	0	0
Wheal Friendship—one at 6*l.*	756	0	0
Wheal Margaret—two at 3*l.*	672	0	0
Trehane—two at 1*l.*	512	0	0
Trethellan—one for 2*l.* 10s.	300	0	0
Herodsfoot—one at 5s.	256	0	0
Bryntail—one at 5s.	250	0	0
Allt-y-Crib—one at 2s. 6d.	156	0	0
Total amount	£118,450	16	0

FOREIGN MINES.

St. John del Rey (gold), Brazil—1*l.* 10s. per share	£16,650	0	0
General Mining Company, Nova Scotia—10s. per share	10,000	0	0
Marmato, Columbia—1*l.* per share	2,700	0	0
Total	£29,350	0	0

The decease of our distinguished correspondent, Dr. Murray Ph.D., M.A., &c., will be deeply lamented by our readers generally.

Dr. Murray has been long and widely known and admired for his attainments in many departments of literature and science—attainments acquired not in schools and colleges, but by the efforts of his active, energetic, and inventive mind in the study, and by the faithful use of his keen and intelligent powers of observation in the world. He was literally self-taught; and his success furnishes, to young people who have imbibed a thirst for knowledge, a powerful stimulus to persevere in the diligent employment of the powers of their mind, even when placed in disadvantageous circumstances, with regard to the attainment of that which they so eagerly desire. Dr. Murray was ever a warm friend of education, and spent much of his valuable time, and many of the energies of his comprehensive and benevolent mind, in promoting the interests of mechanics' institutions, and in furthering such means of popular instruction as tended to foster an appetite for learning and scientific knowledge. He was especially distinguished as a lecturer. In the lecture-room he proved himself equally expert in the details of practice and in the researches of theory; and few who had the pleasure of listening to him there will soon forget his fine musical voice—his mild gentleman-like deportment—his clear and pleasing mode of imparting information, and his ability in making successful and brilliant experiments. Indeed, so skilful was he as a chemist, and so careful was he in his preparations, that he seldom, if ever, failed in any of his experiments. Lord Brougham, who is high authority in matters of literature and science, in a speech which he delivered at an annual meeting of the Leeds Mechanics' Institution, gave the following opinion of Dr. Murray as a lecturer:—

> Lectures are regularly delivered in London, on almost every branch of knowledge, and Mr. Murray, one of the best lecturers in the world, has gone round to various places in this county, such as Whitby, Hull, and Sheffield, and I think the last time I heard of him he was again at Whitby; and various others have gone round to improve the people by that excellent, and attractive, and most convenient mode of lecturing.

Dr. Murray has also done service to the public as an author, and by a variety of important discoveries in chemical science and specific antidotes to several poisons. He has published more than 28 works of practical utility, some of which have gone through several editions. We might quote many favourable notices of his works, and of his many philanthropic and scientific exertions, but we content ourselves with the following:—

> Dr. Murray has written much and often well; sacrificing largely his pecuniary means, and almost exclusively devoting himself to the advancement of science: he will maintain a creditable place in the galaxy of scientific names which adorn the present period.—*Atlas.*

It is delightful to his bereaved relatives and to his numerous friends to reflect that neither the fatigues of his practice nor the absorptions of his theoretical researches as a naturalist and a chemist ever extinguished in the object of this sketch his thirst after the chief good, which is the noblest characteristic of greatness. His inquiries into Nature led him up to Nature's God. He never failed in his public instructions, and in his conversations, and in his publications, to testify to the value and importance of pure and undefiled religion; and his conduct was consistent with his creed. His benevolent heart was a stranger to bigotry and sectarianism; and, in the hours of sickness and of death, he manifested the same meek, patient, and amiable spirit which had characterised his deportment through life.

It is mournful to reflect on the vanity of human desires and purposes. It was the fond wish of Dr. Murray's life to retire and spend his days with his beloved family amid the retired peaceful quiet of the lovely and tasteful spot

which he had selected for his home; but scarcely had he and the affectionate partner of his life taken up their abode at Broadstone, when sickness came—and before the whole of the family entered the dwelling where they had all promised to themselves many days of happiness, death entered and made it a house of mourning. Truly, GOD disappointeth the hopes of man. The remains of the deceased were conveyed to their resting-place, in the Inch Church-yard, by a respectable company of relatives and acquaintances. The magistrates attended in their official capacity. The shops through the whole town of Stranraer were closed—the bells were tolled—the streets through which the procession passed were lined with spectators, and all seemed to express grief for the departed, and sympathy for the bereaved relatives.

An interesting communication, "On the Substitution of Cast-Iron for Wooden Sleepers," from R. W. KENNARD, Esq., of Thames-street, was read by Mr. GRANGER, C.E., at the Royal Scottish Society of Arts. After referring to the importance of good road communication, as being necessary to the promotion of civilization and the well-being of society, the instance of the state of New York in connection with the Erie Canal was adduced, by which it was shown that the representative capital of the state increased in 8 years from 6,000,000*l.* to 27,000,000*l.*, and that of the town of New York from 10,000,000*l.* to 29,000,000*l.* The system of timber sleepers was shown as open to many objections, such as the cost of maintaining the line, the renewing of decayed sleepers, and the instability or looseness of the rail from this cause. Mr. BARLOW's communication to the Institution of Civil Engineers was referred to, pointing out these serious defects. From the statistics, which had been carefully compiled, it appeared that the cost on a mile of road, made on a rail 17 lbs. to the foot with timber, was 3278*l.* 12s.; cast-iron, 2688*l.*—making a saving of expense by the use of the latter material of 590*l.* per mile. According to calculation, the annual saving by the substitution would amount to 17,000,000*l.* of capital, or 28,000,000*l.* in the Three per Cents., and would direct capital from the importation of foreign timber to the mining interests of the country. Our limits do not allow us to enter more fully into the merits of the case at present, but we shall recur to the subject at an early opportunity.

An action was tried in the Court of Common Pleas, last week, presenting some features of interest. The plaintiff, a shipowner at Aberdare, wrote in July, 1848, to Mr. HERRING, a shipbroker in London, requesting him to find freight for a new barque called the *Balgournie*, of about 350 tons register. The broker made arrangements with the Copiapo Mining Company, who agreed to charter the vessel to bring back from Copiapo a cargo of copper ore. By the charter party it was agreed that the vessel should take a load "not exceeding one-third above the vessel's registered tonnage, old measurement." She sailed from Newcastle in September, 1848, arriving in the January following in Copiapo, where she shipped 10,000 quintals, or 453 tons of copper ore, for Swansea. The real measurement was 324 tons new, and 379 old measurement; and, on her return, the plaintiff claimed on the latter tonnage and one-third more—making 505 tons. The counsel for the defendants called Mr. SCHNEIDER, Mr. POWLES, and other gentlemen, extensively engaged in shipping ores and other produce from South America. Their evidence was that the cargo was a full one, and as much as the vessel could carry with safety. Mr. POWLES stated that the agent, who shipped more ore than 30 per cent. over the registered tonnage of the vessel would greatly neglect his duty to his principals. Evidence was also given to show that the same vessel, on subsequent voyages, carried the full cargo, 413 and 460 tons only, and that no dispute had arisen with the charterers on such occasions. Mr. Justice TALFOURD, in summing up, observed that, in his opinion, neither party had rightly construed the charter party. The provision that the cargo should not exceed one-third above the registered tonnage, was to protect the ship from over loading, and not imposing any obligation on defendant to ship to the full amount. The real question was whether the defendant had put on board such a cargo of ore as was in accordance with the charter party? If they put on board such a cargo as the vessel could only conveniently carry, they were entitled to a verdict; but if the jury thought another 50 tons might have been properly shipped in addition, they would find accordingly. The jury ultimately found a verdict for plaintiff—damages, 150*l.*

The apparently satisfactory effect of CALLOW's BLASTING POWDER, in the progress of Lord RANELAGH's experiments, which we noticed last week, has led us to a closer examination of its pretensions, and suggested the propriety of certain inquiries before we can recommend the adoption of any such substitute for gunpowder in mining or quarrying. Such compositions are not new to us, nor is it to be concealed, that chemists, in treating of explosive compounds are well acquainted with many forms which would advantageously supersede the use of gunpowder, for some purposes at least, were it not for certain commercial objections as to manufacture and cost, as well as in respect of difficulties in manipulation and practical application. In the specification of Messrs. MELVILLE and CALLOW's patent, which we have looked to, there is a candid acknowledgement of this fact; for it is admitted as a preamble to the claims, that "the materials mentioned as component parts of their explosive compounds have been before similarly employed, and they, therefore, do not claim such, except in the combinations described." Our Number of the 16th March, 1850, gave an extract from the *Swansea Herald*, with one of the numerous forms in which chlorate of potass is brought into combination to produce explosion, which suggests the possibility of a doubt of the originality of the invention in question, however legally protected it may be by the present defective principles of the Patent Laws. At the same time, we must admit that this does not directly concern us: our present object is merely to see whether the subject matter of the claim contained in the patent, respecing explosive compounds, is all that it professes to be.

Without confining themselves to the given proportions, the patentees describe three preparations, with different combinations. 1. Chlorate, or oxymuriate, of potash, two parts; red orpiment, or sulphuret of arsenic, one part.—2. Of Chlorate of potash, five parts; prussiate, or ferrocyanide, of potash, one part; and sulphuret of arsenic, two parts.—3. Chlorate of potassium, one part; and ferrocyanuret of potassium, one part.

We consider that it is necessary to draw the attention of chemists to this subject, because some test may thus be applied to the inventors' assertions, which, with respect to so serious an innovation, should be cautiously received. This suggestion is not meant for an instant to impeach the sincerity of Messrs. MELVILLE and CALLOW, in offering us their assurance of the excellence of this powder; but so important does this topic appear, that we deem it our duty to submit it to the ordeal of public discussion. If it emerge unscathed, the purer will its merit appear; whilst in the contrary event the miner, who naturally looks to his special organ for information, will be saved from the injurious results which might otherwise arise from the adoption of a spurious novelty, the failure of which might subsequently prejudice the introduction of some real improvement.

There are many questions which we consider highly essential to have answered by some eminent authority, and that in very precise terms. It is no disparagement to the parties in this case to say that their word is not sufficient; for, apart from the circumstance that inventors have a parental and too partial affection for their offspring, in this case there is not even the guarantee of antecedent experience in the art to which the matter has peculiar reference,—they are not known to the world, as learned in chemical science.

Without attempting to intrude upon the province of analysis, we cannot in this case fail to observe that one of the ingredients is a sulphuret of arsenic, the absorption or inhaling of which, combined with any vapour or gas, would be highly detrimental. The first points, therefore, on which we must have satisfactory assurance is, how does the arsenic act in combination with the gases evolved in the explosion? And this question demands an analysis of the results of explosion.

The next point to ascertain is the degree of temperature at which those compounds respectively explode without ignition; and the combinations of foreign ingredients, which by saturation or admixture might produce accidental explosion, should be fairly stated.

We also wish to ascertain the precise effect of moisture—saturation with salt water, or water impregnated with metallic solutions, such as frequently occur in mining; and we may add that it would be useful to learn the result of various experiments with this powder under percussion or friction; and of the abrasion or fracture of masses dried after saturation. Other questions may suggest themselves, but it is probable that if these be candidly and satisfactorily responded to there will be little left for consideration, beyond the simple but necessary one as to the cost of the materials employed, and the probable effect of a new demand in the market in enhancing the value of the supply. We purposely pass over the inquiry whether the gases generated in explosion prejudicially affect metals; for although for military purposes that might be valuable to examine, yet for blasting it seems wholly immaterial.

To the patentees we must naturally look for details so interesting, which these questions should elicit. There are many means for obtaining tremendous disruptive agents, but what we are bound to assure the public is, whether any of them can be safely and economically relied on as a substitute for the long-established one, whose attributes and effects are so well known. Others, as well as Messrs. MELVILLE and CALLOW, can aid us in arriving at an impartial decision; and we shall be happy to afford space for a dispassionate and careful discussion on the comparative capabilities of this and other similar compositions.

COMPANY OF COPPER MINERS OF ENGLAND—HOUSE OF LORDS.

The case for the promoters of this bill was opened by Mr. Talbot before the following committee of the House of Lords, on Wednesday:—The Marquis of Winchester (chairman), the Duke of Norfolk, the Earl of Bandon, Lord Harrington, and the Bishop of Manchester. The learned counsel, in his statement, went over a repetition of the main points upon which he relied as his ground for asking their lordships to renew the charter of this company, as previously stated before the committee of the House of Commons, and of which we published a summary. Mr. Young was then examined, and his evidence was substantially the same as that already given.

Mr. Burke appeared on behalf of Messrs. Guest and Crawshay, iron-masters, and contended at considerable length that the renewal of the charter of the Copper Company would only be a perpetuation of the monopoly they had enjoyed by their charter ever since 1691, and to the prejudice of all traders in iron and tin; and he contended that this company had already violated their charter by trading in iron and coal, which their Act prohibited. His learned friend, Mr. Talbot, had said that this company could not work their copper mines without encountering and working iron and coal; but then, on the other hand, the iron and tin masters might just as well say they could not work their iron and tin without also working copper, but from doing which they were prohibited by this chartered corporation, who, by reason of the loose and vague language of the time, as used in their charter, were enabled to evade its provisions. The committee would observe, on reading the preamble of the bill, that the charter was granted to this company, not for the purpose of enabling them to monopolise the whole of the copper trade, or to evade the law by trading in iron as well, but for the purpose of enabling them to confer a great benefit on the public, by affording them facilities for the working of copper which did not then exist. It had been stated that some of the shareholders in this company were officers in the army, and that the company was involved in pecuniary difficulties, and that if this bill were granted they would be enabled to pay 10s. in 1*l.*; but then he must remind them that much of their embarrasments were the result of their own reckless trading, and this committee would not give any decision upon such grounds, but would say whether or not this bill was called for upon public principle. He contended that it was against public policy, as well as the provisions of the Joint-Stock Company's Act, that shareholders in a public company should have a limited liability, such as this company had, and which no other company enjoyed; yet it was sought to exclude those gentlemen whom he had the honour to represent, and, in fact, the whole of the iron and tin traders in the kingdom, from a hearing in this committee. Such, he thought, showed that the cause of the Copper Company was a weak one indeed. The learned counsel then called their lordships' attention to a recent decision of Lord Campbell in the case of Fox and Henderson *v.* the Copper Company, in which his lordship laid it down that the company had violated their charter,

Mr. Merryweather having replied, the room was ordered to be cleared, and, on re-admission, the chairman said the committee were of opinion that the opponents of the bill had no *locus standi*. The clauses were then gone through, and the preamble declared proved.

NORTHERN COAL MINING COMPANY—WINDING-UP.

The merits of a claim against this company by the London and Westminster Bank were discussed on Saturday, before his Honour Master Tinney. Mr. Galsworthy appeared as solicitor on behalf of the official manager, and Mr. Gibson represented the Newcastle Banking Company, by whom the debt had been assigned to the London and Westminster Bank. For sometime after Mr. Galsworthy had been stating the grounds of his opposition to the claim, the whole affair appeared considerably involved in a complication of accounts and bill transactions, spread over a number of years; but as the case progressed, a good deal of the mystification by which it was surrounded was cleared away by the explanations of Mr. Gibson.

From that gentleman's statement it appeared that the Coal Company kept their banking accounts with the Newcastle Bank, which had gone on for sometime advancing money to the Coal Mining Company, to the amount of 60,000*l.*, until the year 1843, when an account was furnished and a settlement demanded; but the account not having been satisfactorily arranged, the Newcastle Bank, in 1849, commenced an action against the Coal Mining Company, who entered an appearance and took defence, and pleaded the following pleas—namely, *non assumpsit*, the statute of limitations, and payment; but the action had not been prosecuted, as the Banking Company expected that while the Coal Company was undergoing the operation of the Winding-up Act, the Master would take the matter into his hands and dispose of it. However, the bank, after repeated applications, had been unable, until this day, to have the case brought before his Honour.

Mr. GALSWORTHY said he appeared to show cause against the claim, and he had no doubt that, if his instructions were correct, he would satisfy the Master that there was one item at least in the account furnished by the Newcastle Bank against the Coal Company which his Honour would disallow—that item was, the amount of an acceptance for the sum of 2700*l.*, and upon which the action had been commenced, and to which defence had been taken.

Mr. GIBSON begged to correct Mr. Galsworthy—the action had been taken for the recovery of the amount of the whole balance of the account due to the bank.

Mr. GALSWORTHY said his grounds of opposition were these: in the course of the dealings of the company with the bank there was one bill which had been dishonoured, and of which he knew nothing more, and it formed no part of the present case; but there was another bill which the company paid to the bank under protest, as they denied their liability to it.

Mr. GIBSON begged to correct Mr. Galsworthy—the bill had never been paid at all.

Mr. GALSWORTHY: There was a settlement of the banking account in 1843, and that settlement was made with the understanding that this bill should be allowed to stand out on its own merits.

The MASTER: Then there was no payment in money.—Mr. GIBSON: No, Sir, the bill was dishonoured, and placed to the debit of the Coal Mining Company, and formed an item in their regular bank pass book and account. In order to prevent confusion in respect to this bill, he begged to explain to the Master that there had been, in fact, two bills, each of the same amount, 2700*l.*; the first of these bills was dishonoured, and placed to the debit of the company, and it was subsequently taken up by the new directors by other bills, of which the present bill for 2700*l.* was one, also dishonoured.

Mr. GALSWORTHY said, he considered that when the bill was placed in the account of the company that that was a settlement of it; but he would further contend, that the Coal Company could not be held liable, inasmuch as the bill in question was not presented until eight days after it had become due, and, therefore, the company had no notice of it. His next ground of opposition was, that the Banking Company had applied to the Coal Company to waive their objection to the want of notice of the bill having become due, which amounted to an admission by the bank that they had not given notice. He next relied on the statute of limitations, for the bill bore the date of Nov., 1842; and his last objection was, that the bill was drawn by the secretary of the company without their authority.

The MASTER examined one of the bills, and said he saw that it had been drawn by the secretary, "per procuration," for the company.

Mr. GIBSON said the whole history of the transaction could be stated in a very few words—it was this: When the new directors of the Coal Company came in, they and the old directors agreed to pay the bank 17,000*l.*, but all the money they could make up in cash was 8000*l.*, and they brought two bills of Mr. Ord's for the remainder; but he (Mr. Gibson) told the new directors (who are now Mr. Galsworthy's clients) that he would not take Mr. Ord's bills, for he knew they were not worth the paper they were written on, although he was one of the directors of the company at the time. In fact, not one of those bills ever came into the possession of the bank until after all the disputes and differences of the Coal Company had been settled, and the bank never took the bill from Ord. The statute of limitations could not apply to this case, because this bill formed only an item in the general account of the Bank with the Coal Company, which was a regular account current, and was carried down to 1849, when the action was commenced.

Mr. GALSWORTHY said he thought the action at common law should go on, as the Coal Company were determined to take advantage of every legal technical objection.

Mr. ROY said he wished to make this observation, that Mr. Quilter, the official manager of the Coal Company, had had all the bank books up from Newcastle, containing the accounts with the Coal Company, and had examined them very minutely.

After a protracted discussion, the MASTER said his present impression was that the Coal Mining Company were liable for the amount of the bill, as it had been drawn by their secretary "per procuration," and it could not be barred by the statute of limitations, as it formed only an item in the general account current. As to the objection that no notice had been given by the bank that the bill had become due until eight days after, that could have no effect, inasmuch as the Coal Company were aware of the existence of the bill, and the day on which it became due, from the fact that the bill was accepted by Ord, who was also one of the drawers, as well as one of the directors of the Coal Mining Company, and, therefore, his knowledge that the bill was due, and not paid, was notice to the others. As to the objection that the Coal Mining Company were not liable, because the bill was drawn by their secretary, that was inconsistent with another part of Mr. Galsworthy's argument, for if the Coal Company were not liable, why should the Bank apply to the Coal Company for a waiver of the lapse of the eight days—that showed that the bank had not taken the bill on the credit of Ord. This case should now stand adjourned to November next.

KILBRICKEN MINING COMPANY—WINDING-UP.

An adjourned meeting of the parties interested in the claim of Capt. Williams against this company was held before Master Richards on Tuesday. Mr. SUMMON appeared in support of the claim, which amounted to 157*l.*, for services rendered by Capt. Williams, and expenses incurred by him in making a survey of the mine, and reporting upon the state in which he found it.

Mr. HARRISON resisted the claim, on behalf of the official manager, on the ground that Capt. Williams had not made the survey for the use of the mining company, for it was made before the company was formed; and, in fact, it was Mr. Crockford who had employed the captain, and, therefore, he ought to pay him.

The MASTER disallowed the claim.

[This is one of the very few companies, undergoing the operation of the Winding-up Act, whose "tortures," as they may well be termed, have been brought to a close. The official manager (Mr. Wryghte), after incredible labour, has succeeded in getting in all the money due to the company, and in a short time will be prepared to lay his final report before the Master, from which the gratifying fact will appear that a sum, though small, will remain to be paid back to the contributories. How many other companies, now being wound up, are likely to be blessed with such an announcement, or any announcement, but that the *contributories* have indeed been "wound up?"

THE HETTON COLLIERY, NEAR SUNDERLAND.

A model of one of the working pits at Hetton Colliery, is being exhibited at the Great Exhibition of all Nations, in Section I., Class 1, No. 425, and is an object of considerable interest. It consists of a high-pressure winding-engine, which has a 30-inch cylinder, 6-feet stroke, and is equal to 60-horse-power, and draws the Wall's-End coals from a depth of 150 fms., with a cage containing two tubs of 8 cwts. each. The high story of the cage is landed at the bottom of the pit by a hydraulic apparatus, which consists of a cylinder, with a 10-inch solid piston forcing the water through a small aperture, and thereby retards the motion of the cage. The coals are lifted to a height of 20 feet above the surface, and are passed over a "screen" to extract the small, the length of which is 22 ft. by 6 ft. broad, and the bars ½ inch asunder, lying at an angle of 34°, into waggons containing 53 cwts., and are from thence led to the place of shipment. The small coals which pass through the screens are collected by boxes to a point 12 ft. below the surface, from whence they are lifted to a height of 45 feet by a self-acting apparatus attached to the engines, lying at an angle of 45°, and are then passed over a gauze 8 feet long by 2½ ft. broad, lying at an angle of 40°, containing three apertures to a square inch, to extract the dust, which is sold to glass-works and patent fuel companies. And they are then passed over a screen 4 ft. long, by 2½ feet broad, lying at an angle of 37°, the bars of which are $\frac{5}{16}$ths of an inch apart, to extract the seconds, which are sold for engines and factory purposes, and produce nuts, which are sold at Landsale.

At the Hetton Collieries there are three seams of coal—the Hutton seam, 4½ ft. thick, producing best Wall's-End coals, at a depth of 150 fms.; the Low Main seam, at a depth of 130 fms., 4 ft. thick, producing first-class steam-coal; and the High Main coal seam, 6 feet thick, at a depth of 110 fms., producing second-class household coal, or Lyon's Wall's-End. The aggregate power of the engines for raising coals is 330-horse power, capable of raising about 3500 tons per day, from a depth of 150 fms. At present there are engines employed equal in the aggregate to 240-horse power, and raise about 2400 tons per day. The ventilation is produced by three furnaces at the Hetton, and two at the Elemore Pits, which consume 235 cwts. of small coals in the 24 hours. The temperature of the upcast at Hetton is 140°, and is 14 ft. diameter; and the temperature in the downcast pits at Hetton and Eppleton is 60°, and their diameters 12 ft. And the total quantity of air passing through the Hetton and Eppleton Pits is 190,000 cubic feet per minute. At Elemore Colliery the temperature in the upcast is 135°, and 9 ft. diameter; and the downcast temperature is 60°, and diameter 12 ft.; and the total quantity of air passing through the Elemore Colliery is 60,000 cubic feet per minute.

The Hetton Colliery is situated about eight miles from the port of Sunderland, the place of shipment, and there are three locomotives, five fixed engines, and five self-acting inclined planes to convey the coals to the staiths on the banks of the River Wear, where there are seven "drops" for shipping the coals. The number of men and boys employed is about 1500, and there are also 100 horses and 120 ponies employed on the works.

The model of the improved mode of screening, &c., we may add, is by Mr. J. Wales, who is connected with the Hetton Colliery Company, and upon whom it reflects much credit.

STATISTICS OF THE COAL TRADE.

BY BRAITHWAITE POOLE, ESQ.

The coal traffic of Great Britain is the largest of any description of traffic probably in the world; it is stated by geologists, and admitted in the collieries, that the capability of supply is almost unlimited, and that there are drawing engines already working with power sufficient to raise 30 per cent. more coal than is brought up.

There are upwards of 3000 coal mines in Great Britain, which employ nearly 250,000 men, women, and boys, underground and above, termed hewers, putters, trappers, overlookers, bankmen, &c. The capital invested in working stock, tramways, staiths, and harbours, altogether exceeds 30,000,000*l.* in value; and the "get of coal," as it is technically termed, now amounts to upwards of 34,000,000 tons annually, the estimated value of which at the "pit's mouth," is 10,000,000*l.* Of this enormous quantity, one-third is raised in the Northumberland and Durham districts, from whence the chief exports of the kingdom are made by the Rivers Tyne, Wear, and Tees, both foreign and coastways. The chief points of home consumption are in the iron-works of Staffordshire, South Wales, and the West of Scotland; which, together with the lesser works of North Wales, Shropshire, Yorkshire, and Derbyshire, consume nearly one-third of the whole. The residue is consumed in smaller manufactures generally, such as those of cotton and woollen, the gas and salt works, &c., and by the populations of large towns for domestic purposes.

Coals are exported duty free to British possessions and to foreign countries in British ships, or in foreign ships entitled to the privileges conferred by treaties of reciprocity; but a duty of 4s. per ton is chargeable upon coal exported in foreign ships, disentitled as above, and the total amount of such duties received during 1849, was only 3233*l.* 13s. 2d.

Vessels at Hartlepool and other ports on the east coast, are frequently cleared out at the Custom House before loading; and as a chaldron of coal, though computed at 2 tons 13 cwts., more frequently weighs 2 tons 15 cwts., it is well known that the actual quantity exported from thence far exceeds the amount of tonnage registered in the Custom House. The policy pursued by the York, Newcastle, and Berwick Railway Company, was to purchase the waggons and engines from every coal proprietor, and transact the whole business themselves; whereas other railway companies prefer the coal owners to build and keep each their own stock of waggons, thereby uniting their capital and interest with the prosperity and well-working of the lines. The tolls and charges made by the railway companies vary considerably, from ½d. to 3d. a ton per mile. The proper mode of making charges to encourage the traffic, should be at so much per train of so many waggons, according to distance, gradients, and other circumstances connected with its transit. The mode of transacting the business varies in like manner in different districts. The York and Newcastle Company, for instance, charge 3d. per ton "cell rent," and do all the business themselves, which includes clerkage, porterage, unloading, shovels, selling and receiving payments on the delivery of the coal to the public. Again, the Manchester, Sheffield, and Lincolnshire Company charge 3d. per ton wharfage alone, whilst the Edinburgh and Glasgow Company charge nothing for wharfage. The charge for demurrage of waggons also varies. Some companies allow 24 hours, others 48 hours, and afterwards charge 1s. to 5s. a waggon per diem. Upon the London and North-Western line, the charges are not uniform, different districts having been accustomed to different usages: in the South the coal is stacked at the stations, whereas in the Northern division it is almost invariably removed on arrival.

The shipments during the three years, 1847, 1848, 1849, amounted to upwards of 11,000,000 tons each year:—

	1847.	1848.	1849.
Coastwise ..... *Tons*	8,874,599	9,074,079	8,552,706
Foreign	2,483,161	2,785,300	2,785,300
Total	11,357,760	11,859,379	11,338,006

In 1849 there were 12,074 vessels reported; and in 1850, 12,633.

COAL BROUGHT INTO LONDON IN THE YEAR 1850.

Ships.	Quality.		Tons.
2865	Newcastle Main		977,266
1585	Newcastle Wall's-End		445,712
734	Sunderland Main		193,523
2916	Sunderland Wall's-End		809,240
3220	Stockton, Middlesbro', &c.		867,192
482	Blyth		112,555
36	Scotch		5,344
369	Welsh		89,574
254	Yorkshire		18,784
15	Liverpool		4,028
83	Small coal		20,786
12,559			3,543,944
13	Culm		2,936
62	Cinders		6,424
12,633	Total imported		3,553,304
	By canal ..... *Tons*	29,479	
	London and North-Western Railway	44,865	
	South-Eastern Railway	5,286	
	Great Northern Railway	4,944—	84,574
	Grand total		3,637,878

The Lancashire coal-field produces about 4,000,000 tons annually, in the districts surrounding the towns named:—Wigan, 2,000,000 tons; Bolton, 1,000,000 tons; St. Helen's, 1,000,000 tons.

There are various qualities of coal, known under several denominations

in different districts of the country; as, best, 2d best, Burgie, or engine coal, round, or nut coal, anthracite, Parrot, Cannel, slack, small coal, &c. Prejudices exist in the minds of the consumers of house-coal—for example, in Birmingham and Glasgow, where a white ash coal has customarily been burned, the inhabitants decry a brown ash coal, whereas in London and Edinburgh a white ash coal is not tolerated.

The consumption in Manchester last year, 1850, amounted to 1,230,000 tons; in Preston, 410,000 tons; in Chester and its environs, 80,000 tons; and Birkenhead exported 50,000 tons. Glasgow consumed largely, 1,650,000 tons; and the surrounding neighbourhood of Lanark, Renfrew, and Ayrshire, upwards of 3,000,000 tons; whilst the iron district of South Wales, in the aggregate, disposed of nearly 4,000,000 tons, exclusive of the exports of that district.

In London the prices are published, and may be seen on referring to the coal market reports in the *Mining Journal* and other newspapers (the present average price in the Pool is 14s. 6d. per ton); but the expenses attending the transmission of a ton of coal are not published, therefore, we enumerate them:—

Cost price of a ton of best house coal	7s.	0d.	
Freight, Newcastle to London	6	0	
Insurance	0	1½	
City dues	1	1	
Half weighage	0	1½	
Factory, 3d.; *Del credere*, 1d.	0	4	
Barge, 1s. 8d., and porterage, 2½d.	1	10½	
Wharfage	0	6	
Allowance to buyer	0	6	
Cartage and agent's commission	2	6=20	0

PATENT STEAM-BOILER FURNACES.

[Patented by Mr. D. L. Williams, of Thornhill, Llandilo, Carmarthen. Specification enrolled June 7, 1850.]

Fig. 1.

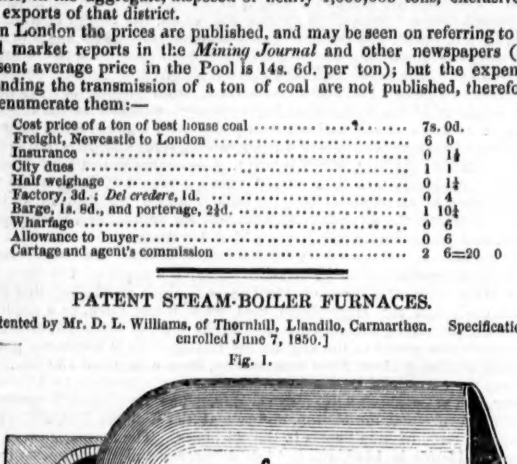
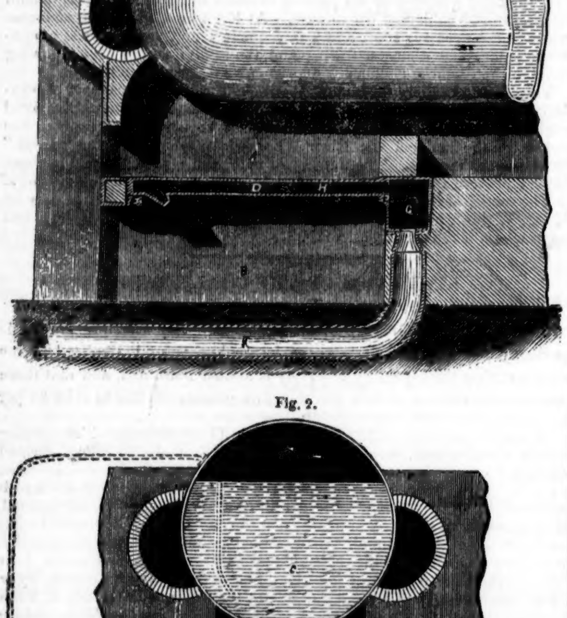
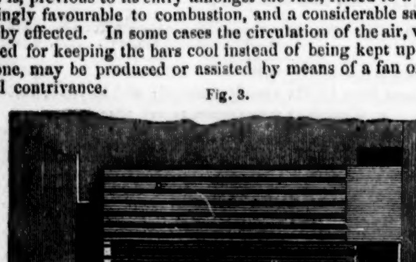


Fig. 2.



My improvements in furnaces have for their object the construction of furnaces, particularly those employed for generating steam, in such manner that the furnace bars shall be always kept in a comparatively cool state, and that the air (employed to support combustion) or water (employed to feed the boiler) as the case may be, shall be heated previous to their introduction into, or subjection to the direct action of, the furnace. Fig. 1 is a logitudinal section of a steam boiler furnace thus constructed, fig. 2 a cross-section of the same, and fig. 3 a plan. A is the fire-place; B, the ash-pit; C a portion of the steam boiler; D D the furnace bars, which rest at front upon the cross-bearer, E, and at the back or further end of the furnace upon a bar, F, which forms one side of a hollow chamber, G. The fire-bars, D D, are hollow, each having a channel, H, passing through it from end to end; at the back of the furnace these different channels open into the chamber, G (as represented in the sections of the bars in figs. 1 and 2), while in front they terminate in openings, I I, formed in the lower side of the bars. K is a pipe through which a constant supply of atmospheric air is kept flowing into the chamber, G, and thence into the channels inside of the furnace bars, whence the air, in a heated state, issues through the openings, I I, passes directly through, between the furnace bars, into the fire, and tends to support the combustion of the fuel. By the arrangements just described, the cold air passing through the bars keeps them from becoming too much heated, and they, therefore, remain much longer in a good working condition, while the air supplied to the furnace is, previous to its entry amongst the fuel, raised to a temperature exceedingly favourable to combustion, and a considerable saving of fuel is thereby effected. In some cases the circulation of the air, which is thus employed for keeping the bars cool instead of being kept up by rarefaction alone, may be produced or assisted by means of a fan or other mechanical contrivance.

Fig. 3.



The arrangements, which are shown in the engravings, for heating air to supply a steam-furnace may, with slight modifications, be applied to heating the water intended to feed boilers, or for other purposes. In that case the openings, I I, in the bars at the front of the furnace are connected to the pipe, I[2] (indicated by dotted lines), and a constant supply of cold water is made to communicate with the chamber, G, by means of a pipe, G[2], smaller than that for the air. The fire bars are thus kept constantly filled with water, which, as it gets heated, is drawn off by means of the feed-pump, M (connected to the pipe I[2]), and is forced by it into the boiler through the pipe, I[3]. By the force-pump being thus interposed between the boiler and the furnace bars, the pressure exerted by the steam upon the surface of the water in the boiler is prevented from in any way being exerted upon that contained in the furnace bars, so as to cause any disrupture to take place, either in them or in joints.

Instead of having the whole set of bars applied to either of the purposes above described, part of them may be employed for heating the air, and the remainder for heating the feed water; in which case the chamber, G, must be partitioned off, and the connections of the different pipes disposed so as to suit such an arrangement, or a continuous stream of water may be allowed to flow through the bars, to keep them from becoming overheated, the heated water being permitted to run away instead of being forced into the boiler.—*Mechanics' Magazine.*

ON COPPER SHEATHING, AND THE PROBABLE CAUSE OF ITS DETERIORATION.—No. III.

BY JAMES NAPIER, ESQ., F.C.S.

Mr. Prideaux, whose long experience in the matter under discussion deserves deference, seems almost inclined to abandon the quality of the metal, and seek the cause wholly in the conditions, which he states thus:—

1. *Friction* from heavy shore work, faster sailing and more active service.
2. *Corrosive waters*, as the drainage of mines, manufactures, sewers, and putrescent matters in the sea.
3. Climate.—Corrosive action being increased by heat, and sheathing is known to waste quicker in tropical climates.
4. Weather.—Electrical and thundery, storms, &c.
5. Electro-Chemical.—Nails and metal giving a positive tendency to waste.
6. *Matters laid under sheathing*—as tar, paper, felt, which may have acid or alkaline properties.
7. *Timber of the vessel.*—Some wood having acid properties, &c.

Some of these seem as catching at straws, while others, as already referred to, are important. Sir H. Davy found, that on a vessel going at a speed of eight miles an hour, the copper most exposed to the friction of the sea lost more than double that which was least exposed; and Mr. Prideaux found that pieces of the same quality of copper put into sea water from different localities, were differently acted upon. In 13 days' exposure the waste of copper in water from—

Heart of Gulf stream was	1·81
„ Caribbean Sea	0·40
„ Plymouth Harbour	0·31

Such circumstances as these are easily defined; but when two vessels sheathed at one time, and kept nearly under the same conditions, and the copper of the one lasting two or three times that of the other, or even one vessel, her sheathing at one time lasting 17 or 20 years, and at another not more than three or four, and employed on the same service, are circumstances not so easily accounted for, and requires a more strict investigation.

Mr. Prideaux sums up his inquiry with the following:—"To whatever extent the recently increased waste of sheathing may be due, such as constant employ, much greater velocity, &c., there is reason to fear the fault is still to be sought too often in the copper itself." These views induced him to seek information, in a series of letters to the *Mining Journal*, to find if any modification or change had taken place in the smelting of the ores, so as it might lead to the cause of the increased deterioration of the copper, but such information is not to be had, except by a detailed history of all the operations of smelting during these last 80 years.

Having thus briefly given an outline of the present state of our knowledge of the important question of copper sheathing, I will now call the attention of the Society for a short time to my own views of the matter, or rather to a vindication of the principle upon which Sir H. Davy based his opinion—namely, that pure copper, and uniformity of composition and character, are what are required for good sheathing, referring at the same time to some of those prominent changes which have taken place in the production of the copper, to cause the great deterioration recently so much complained of.

That old sheathing, such as that in use last century, is superior to that of this century, especially that made within these last 25 years, is a fact generally admitted. Is, then, the cause of this difference due to the quality of the metal? In the absence of chemical analysis of old sheathing, I have sought out probable proof in respect to its quality in the source from which the copper was obtained. Dr. Black, in his *Chemical Lectures* (vol. ii. p. 647) says,—"Anglesea contains the richest bed of copper, perhaps, in the world, and of late years yields about 25,000 tons of metal annually. The vein is about 70 feet thick."

These mines were discovered about the time sheathing was introduced into the navy, and it is computed that for many years not less than 80,000 tons of ore were extracted annually, and the copper commanded the market of the world. Now, the copper from these mines has always been, as it still is, although the quantities now got are very small, the best and purest in quality, and entirely free from those impurities which I consider deteriorates the copper of this century. Towards the close of last century these mines became poorer, and have gradually declined; but ores from Cornwall and other sources have increased, but the Cornish ores do not yield copper of the same purity as the Anglesea ores. The produce of the Cornish mines from 1800 to 1830 was more than doubled—that of 1800 being 5187, and that of 1830, 11,554 tons, but considerable importations were made from Russia, which is also good copper, and assisted to take the place of the declining supply of the Anglesea ores.

In so far, then, as these ores varied in quantity and quality, so would be the relative deterioration of the metal, but it was more than relative as regards the sheathing, for the superior quality of Pary's Mine, and Russian copper caused it to be used either wholly, or mixed with the best Cornish for hammered and other particular work, throwing the burden of the inferior copper into sheets, as a lower quality of copper will roll than will hammer. Mr. Prideaux, to whose papers I am indebted for many valuable practical hints, asks, in one of his inquiries respecting the mixture of the ores for smelting,—"Were these mixtures not modified to suit the rich American ores, when these were introduced, from which period some of the best informed persons date the most rapid sea waste in the sheathing?"

The ores referred to are from Chili, and the localities thereabout. There are some of these ores very pure, but the following analyses of two samples will show their general character:—

Copper	39·6	Copper	28·50
Sulphur	29·3	Iron	25·83
Iron	21·4	Sulphur	23·70
Siliceous matter	16·8	Silver	0 06
Antimony	1·6	Silica	18·70
		Antimony and arsenic	2·80
A. Thomas.	99·7	John Cameron.	99 64

Poorer ores of Chili, and which would not pay transit, undergo an operation of calcining and fusing near the mines, which takes away the matrix, and the product is brought to this country under the name of regulus. The following two analyses will give an idea of the general composition of this compound:—

Copper	59·6	Copper	52·8
Sulphur	19·1	Sulphur	20·3
Iron	15·4	Iron	18·6
Antimony	1·2	Silver	0·1
Siliceous matter	2·8=98·1	Antimony	1·4
		Silica	4·2=97·4

These ores and regulus are mixed with the Cornish ores during their progress of smelting. Previous to the introduction of these ores, the average of the ores smelted did not exceed 8 per cent. The operations of smelting are a series of calcining, fusings, and roastings, amounting to about seven or eight operations, during which the greater portion of impurities are scorified. The introduction of these richer ores shortened and lessened the number of operations, and also the chance of so completely slagging off the deleterious matters.

Statistics of British Commerce.—In the *Mining Journal* of 8th March we noticed the publication of the first part of a work on this subject, in the form of a commercial cyclopediæ, giving the most complete detailed information respecting every article of trade and commerce, the duties imposed, cost of carriage, method of packing, sources of supply and demand, &c., from the pen of Mr. Braithwaite Poole, the general manager of the goods traffic on the London and North Western, Lancaster and Carlisle, and Caledonian Railways. As a specimen, we then gave the article "Bricks," and in another column we insert from the second number of the volume a condensation of his remarks on coal. When complete, Mr. Poole's work will be one of the most valuable, for statistical information, ever published, and, in fact, become indispensible in the libraries of public institutions, and all interested in commercial pursuits.

Original Correspondence.

THE COPPER REGION OF LAKE SUPERIOR.

Sir,—I arrived here (the copper region of the world) about 12 months since, and have been endeavouring to get up a statistical account of things relating to this wonderful country for your Journal; and though I have not yet been able to get all I want, I shall shortly succeed in completing my task. In the meantime, I will give you a brief outline of it. In the first place, the copper region embraces an extent of over 200 miles in length by some two to five or six miles wide. The veins are innumerable, running parallel to each other, and in many instances not many yards apart—the whole of which lies in a band of trap-rock, forming considerable high bluffs. The copper is all native, or pure copper, mixed with large pieces of pure silver of many pounds weight, and is found partly in small particles, mixed up in the veinstone, which is their stamp-work, and partly in masses, varying from 1 lb. to 200 tons. These large masses have to be taken out by excavating all round, and cutting them up by cold chissels and hammers, in sizes suitable for getting to surface. The copper reaches to the surface, and, in some places, protrudes through in masses. The veins are very regular, and require but little research to follow them for many miles. The copper is the purest known. Nearly all the mineral lands are now taken up. I have got one tract of mineral land of 2880 acres, with nine splendid copper veins, on which I am driving cross levels to intersect them. The veins lie along the bluffs.

Several other veins have also been discovered; but these alone are more than sufficient, and for which a company has been formed, who are now working it. It consists of 20 shareholders, and is divided into 10,000 shares, at $1 each, which are now worth $5 per share.

Another location consists of 160 acres, with numerous veins, one silver. The veins on this location, instead of lying parallel with the bluffs, crop or end out on one of the highest bluffs in this vicinity. It has been named Prospect Bluff, from whose summit Lake Superior, 18 miles distant, can be seen. The levels here may be commenced at once on the vein, and driven from the foot of the bluff direct on the vein. The saving will be immense, as it will not require either pumps, whimseys, horses, nor anything save driving and wheeling out. There are splendid streams for stamps, boating, &c. This last tract would be worth in England 100,000*l.*; but it could be procured for 4000*l.* W. K. C.

Ontonagon, State of Michigan, Lake Superior, May 27.

MINING IN CALIFORNIA—THE NEVADA DISTRICT.

Sir,—The stranger and traveller is struck with astonishment as he enters the precincts or suburbs of Grass Valley and Nevada. Before he is aware, he imagines himself travelling over the wide-spread diggings of Potosi or Galena, except that he is surrounded with lofty pine trees, rising frequently over 200 feet in height. These pines are of immense value to the miners in constructing their houses, in timbering up the subterranean tunnels and shafts, as well as for furnishing fuel for steam and smith purposes. At Grass Valley, several steam-engines are occupied night and day in stamping quartz for the gold contained in it, while numbers of men are employed in selecting the best specimens in which gold is visible, and pounding them down to sand in iron mortars after they have been burned in a hot fire to facilitate the operation. The larger pieces of gold are collected as fast as beaten out, and the smaller particles afterwards washed out without the aid of quicksilver. The amount taken in this manner from Mr. Hough's vein on Gold Hill, one day last week, was $4000. More perfect and more powerful machinery is about being erected. It is ascertained that one cord of wood put under a steam-engine, and set to stamping quartz, effects the labour of 180 men for one day of 10 hours. Very rich veins are already discovered and opened at Nevada, particularly one called the Gold Tunnel, which runs directly under the rich "Coyote Diggings." Other rich gold-bearing veins are found to traverse the hills at right angles to the main veins, which generally run parallel with the strata in a northerly and southerly direction. The Coyote Diggings are found to correspond to many of the gold deposits in Russia, being found at the bottom of a former lake or bed of a stream. The gold is found to rest on a bed of soft granite in a state of decomposition, and sometimes sinks into it for about an inch or more. Over this soft granite is a bed of compact gravel of 3 feet or more in thickness: this is rich in gold. Above is clay and parti-coloured earth, together with trunks of trees, leaves, vegetable matter, with numberless water-worn pebbles for 80 feet up to the surface. Many shafts are sunk from the surface to this rich deposit, and these tunnels or drifts extend in all directions to excavate the gravel, and bring it to the surface for washing.

Instead of perpendicular shafts, tunnels have been cut in from the bottom of several ravines, and penetrated as far as 600 ft. from the precious deposit. Other diggings of a similar character are being discovered and laid open, daily augmenting the great amount of gold taken from Nevada and its vicinity. The process of washing almost exceeds belief in the various operations of rocking, toming, and sluicing. For this purpose, canals have been cut from 3 to 13 miles, and the streams taken from their beds, and the melting snows of the Sierra made to literally wash down the hills and mountain sides. In one place a hill is tunnelled, and the stream passes through it, while on its summit, almost directly over the tunnel, is a large artificial lake or reservoir, distributing another stream brought from another source.

I hope to send you further accounts from time to time.

Nevada, May 5. One of the Miners.

WILLMOTT'S GAS ESCAPE AND FIRE DETECTOR.

Sir,—Referring to my letter of 14th June, on the subject of explosions in mines, and on my invention to give timely warning to those engaged therein, I beg to call attention to the late lamentable accidents at Glasgow, Barnsley, and other places—some of them within a few days, and also to the extensive *fire* at London-bridge, all of which might to a great extent have been avoided, had my gas escape and fire detector been employed. The *Times* of June 12th states that, in the neighbourhood of Barnsley, the loss of life in three explosions, since February, 1847, exceeds 163 persons; and not long since, at Glasgow, upwards of 60 were destroyed in one mine, on which occasion a large sum was raised for the relief of the sufferers' wives, children, and other relatives. No one can doubt the charity and commisseration evinced by humane individuals after accidents have occurred; but would it not be still more humane to adopt some means of prevention? E. H. Willmott.

Cannon-place, Mile End-gate, July 10.

ACCIDENTS IN COAL MINES.

Sir,—In an article with this title in your Journal of June 21st, signed Matthias Dunn, mine inspector, there are so many inconsistencies that I, a practical miner, cannot help observing upon them, for the benefit of your numerous interested readers. In the first place, I feel it my duty to complain that observations made on the subject of mines and their better management are not couched in the regular and well understood mining phraseology, as by the use of such expressions as "bottom stone," "cross beams of the shaft," "bottomers," "the rooming out of the shaft bottom," &c., much misapprehension is liable to result; as who conversant with mining can rightly divine the meaning of "bottom stone?" Does he mean the scaffold or sump covering in the pit's eye, or the roof stone of the "mouthing" against which the "hooker-on" or "cager," is squeezed by the cage when the engine "stretches-up?" This last is so usually impossible that I cannot entertain it, and the engine moving the cage away from the bottom of the shaft could not be competent to crush any one under the cage. Any one well accustomed to the act of "hooking-on" must be well aware how seldom it can happen that *false* or *anticipated signals* to "stretch-up" can be, or are given, and engine-men are generally too fond of leisure to start their engine without a signal; and the accidents of falling down the shaft cannot, in my opinion, be much reduced in number, as this part of mining disaster may be said to be at its minimum, and a necessarily attendant casualty on the use of the best constructed apparatus. Colliers are careless, always were so, and to my thinking always will be, even as the inhabitants of the neighbourhood of the operation of earthquakes or volcanic eruptions; and no instruction will ever make them otherwise, as even when burnt by fire-damp and recovered, the miner on resuming his dangerous occupation is *fearful* but not *careful*.

How many "quarters," or tons of coals, would be "wound-up" under a great demand, if the advice, with its delays, of his fourth paragraph; were attended to? In the whole of my experience in coal mining, which has been pretty extensive (witness my 45 years' *active* service in every capacity at most of the larger collieries in Lancashire), I never saw an instance of the want of proper room at the bottom of the shaft, and where it could exist, few miners would tolerate the inconvenience beyond a single

week. On the subject of ventilating furnaces and the use of chains, I purpose troubling you again on another occasion. JOHN MARLOR.
Little Hulton, near Bolton-le-Moors, July 1.

THE IGNEOUS THEORY.

SIR.—Though I have been debarred, by domestic affliction, from taking any share in the mineral lode controversy, I have watched its progress with much interest, hoping to gather valuable information from the practical experience of your mining correspondents. It appears from what has been advanced on the subject, that we in reality know nothing certain of the origin of mineral lodes. But in the absence of real knowledge, the explanations of some of your correspondents, and particularly those of Mr. Ennor, carry a strong conviction with them of the probability of their correctness.

In some of the communications on the subject of this controversy the igneous theory is strongly maintained. If there were no other cause to which the internal heat of the earth could be attributed, it would be very well to ascribe its origin to internal fires. The centre of the earth are the maximum of heat, says one, as the highest regions of the atmosphere is of cold; and why? Because the upper regions are electro-positive, and the centre of the earth electro-negative; and as "electricity is cold," its absence (the negative state) is heat. In other words, were it not for electricity, all would be light, fire, and heat. There is not, however, a shadow of proof that cold is electricity. On the contrary, it is shown by experiment that heat results from the presence of electricity—*e. g.*, when a piece of fine wire is placed in the circuit of a powerful voltaic battery it becomes red hot—not because it is placed in a negative state, but on account of the excess of pyrogen passing through it. When the lightning made the conductor on St. Paul's Cathedral red hot, the *presence*, and not the *absence*, of the fluid produced the effect. When gunpowder is exploded by electricity heat is required for the purpose, and that not to a small degree, the explosive point of gunpowder being about 600° Fahr.; thus pyrogen, when in motion, produces heat. It also produces cold. Peltier discovered that a galvanic current generates *heat* when travelling from antimony to bismuth, but *cold* when proceeding in the opposite direction. Taking advantage of this discovery, Lenz produced congelation. Heat and cold thus appear to be electrical effects, like light and magnetism, but they are not electricity itself.

To return to the igneous theory. Where is there a shadow of evidence of the existence of a central fire? The crystalline construction of granite sufficiently proves that it is not of fiery origin. Lava from a volcano is totally different to it in appearance. Further, the existence of central fires or source of heat would be proved by the gradual increase of heat in mines, and the temperature would rise in an increasing ratio the lower we descend into the earth, on account of the absence of direct radiation. The experiments of Mr. Fox, in some of the deepest mines in Cornwall and Devon, prove the opposite of this to be the fact. Taking as zero a temperature of 50° at 10 fms., one of his tables show that, to obtain an increase of 10° in temperature, descents were required of 50, 72, and 114 ft., and another table 37, 78, and 126 fms. In the Journal of the 31st May, p. 262, it is stated in a paper "On the Internal Heat of Copper and Tin Mines," that

AT PARK-AN-NOWETH,		AT EAST POLDICE,	
7 fms. give an increase of	6°	184 fms. in depth give	100°
8 fms. more a decrease of	3°	83 „ more give a decrease of	8°
30 „ „ increase of	7°	20 „ „ an increase of	2°
11 „ „ „	5°		
25 „ „ „	7°		
9 „ „ „	Nil		
8 „ „ „	4°		
1 „ „ „	4°		
57 „ „ „	8°		

These facts afford the strongest possible proof of the unsoundness of the igneous theory; for if the heat near the surface of the earth were due to a central source of heat, the increase would be more regular, and in an increasing ratio in proportion as we approached the plutonian centre The theory I communicated in the *Mining Journal* of the 2d Nov. last. p. 527, when treating "On the Uses of Pyrogen in Nature," is in entire accordance with these observations, which, as it may not be at hand with many of your readers, I will here repeat. The electric currents circulating in the earth descend but little depth into its crust, because it is a property of the particles of the fluid to repel and force each other from the interior of any body on which they are collected to the surface, on which account they are found only on the exterior of a metal conductor or roll of wire gauze. Through the operation of this law the earth is not saturated with the electric matter, as was formerly supposed, but the currents that are circulating about it move as near the surface as possible—as near, in fact, as the conducting power of the soil will admit of; for the matter of the earth offers considerable resistance to the passage of a current of pyrogen, the degree of which depends much upon the distance through which the fluid has to pass, for it is found that the resistance is less for a greater distance than a short one—a very natural result, because in the former case the fluid has the opportunity of descending into a lower or moister stratum, and, therefore, a better conductor. Were it not for the general state of dryness that prevails near the surface of our globe, the fluid would not descend below, owing to the repulsive force that drives it from the centre; but as it is its nature to follow the best conductor, the one peculiarity modifies the other to a certain extent, and the fluid moving along by the inferior strata, gives rise to that increase of temperature which has originated the idea of a central fire. The degree of heat is proportional to the quantity of fluid in motion, and the resistance offered to its progress as when a piece of fine wire is placed in a galvanic circuit. Mr. Fox's experiments, and the observations at Park-an-noweth and East Poldice, agree with this hypothesis; but they are opposed to the igneous theory, for the heat, according to my hypothesis, is generated laterally, and not vertically, as in the other. Hence the irregularity of descent for a given increase of temperature, and the anomalous fact of a decrease of temperature in some of the instances referred to on an increase of depth.

There are other facts in opposition to the igneous theory that may be noticed on a future occasion. I will here only observe further, that the foundation of the igneous theory being proved unsound, it ought not to be admitted into consideration in explaining the phenomena of the origin of deposits in mineral veins.—JOHN J. LAKE: *Portsmouth, June 30.*

MAMMOTH LOCOMOTIVE.—One of the greatest engineering difficulties in constructing the railway intended to unite the port of Trieste with the capitals of central Europe is found to be the mountain called the Semering, in the Alps, between Murzuschlog and Glognitz, the distance it covers being about seven leagues. To work the line over this part but two modes were found practicable—one to establish a series of stationary engines to draw the trains up inclines, and the other a series of inclines accessible to locomotives. This latter plan has been decided on, and to procure engines of a sufficient power an offer has been made by the Austrian Government of a prize of 20,000 imperial ducats, to induce manufacturers to build engines of sufficient power to perform the work. The manufacturer to whom the prize is awarded will also get an order for five machines similar to the one approved of. The lowest strength of the contending engines is to be of 150-horse power. The difficulties they will have to contend with are very great; for, besides the numerous short curves, there are eight tunnels, some of which are also built on curves; the inclines are very steep, and the rails in the tunnels are always very wet. Seven competitors have come forward—four German, two English, and one Belgian; and the trial, concerning which great interest is manifested, is to take place on the 1st of Aug.

STEAM CARRIAGES ON COMMON ROADS.—Messrs. Clark and Motley, of Bristol, have just patented a new steam locomotive, for the conveyance of passengers and goods on common roads. The entire machine is intended to consist of an engine of from 6 to 10-horse power, to which is attached an omnibus, or long-bodied carriage, capable of accommodating 40 persons and a certain quantity of luggage. With this load the patentees assert the capability of their invention to attain an average speed of 10 miles per hour on ordinary roads, and the power of ascending inclines of one in six or eight. A speed of 16 miles an hour might be checked, and the engine brought to a stand-still, in the space of 16 feet—an important consideration where there is any danger of a collision. A model of the engine has been exhibited during the week at the offices of Messrs. Hinton and Son, solicitors, Small-street; it met with deserved praise and encomium for its simplicity and evident adaptation for the purposes contemplated by the patentees, who feel assured that they will be able to carry passengers at one farthing per mile, and that, too, at a profit.—*Bristol Mercury.*—[We understand that Messrs. Clark and Motley are progressing most favourably, and the subject is exciting great interest. A public meeting will be held in the Guildhall, on Wednesday, for affording them an opportunity of explaining the details, improvements, and advantages of their patented steam-carriage, at which it is expected the mayor, Sir J. Haberfield, will preside.]

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending July 5, was 30,439.—Amount of money, £126 16s. 7d.

BRITISH GOLD MINES.

It is generally known that gold has been found in Wicklow, Ireland, and in the granite districts of the stream tin works of Cornwall. It is not so well known that gold has been discovered in appreciable quantities in the gossans and mundics accompanying copper ore; indeed, some of the latter occasionally contain a variable amount of gold, sufficient to render the question of its extraction an object of economic importance: in fact, the less valuable metal, silver, is separated at Messrs. Vivians' copper works, Swansea; gold being, however, so much more rarely found, the investigation of its presence in copper and lead ores is generally overlooked, yet that it is present may be learned from the following fact, for the correctness of which we can vouch:—In one of the earliest articles on the Exhibition we described the mode of forming sulphate of copper by means of sulphuric acid and old copper sheathing, previously oxidised in a reverberatory furnace. At a very extensive chemical manufactory of this character the manager saved all the sweepings, dirt, &c., which remained unacted upon by the sulphuric acid. When accumulated to the amount of nearly 3 tons, it was assayed and found to contain 8 ozs. of fine gold, 154 ozs. of fine silver per ton—worth in the aggregate, 74*l.* per ton. The iron pyrites furnished from the mines of Messrs. Williams, Foster, and Co., and shipped from Wicklow, for the purpose of being converted into sulphuric acid by the Lancashire soda makers, contain from ½ oz. to 1 oz. of gold to the ton of pyrites, an amount that could be economically extracted. With two exceptions, there are no modern instances of attempts being made to render the extraction of gold from British ores an object of commercial importance; these will be noticed hereafter. The ancient relics composed of gold, such as torques, &c., were doubtless formed from stream gold, such as that which is found in Wicklow, and in greater abundance in other parts of the world. It will not be going out of the way to remark here that the reason why stream gold works fall off so rapidly arises from the circumstance that, on their first discovery, the lucky finders are put in possession of the aggregate quantity of gold accumulated during countless ages by the disintegration of the mother rock, usually quartz, or a species of granite, the bulk of the stony matter and debris being long since washed away by the influence of rains and torrents, the precious metal not being so readily removed, owing to its superior specific gravity. In this way the gold seekers at the Californian "diggings" are rapidly gathering the gold, which has been slowly deposited during centuries. In the case of California, however, there does appear to exist very credible evidence that the gold may be "mined" with advantage, the rock being analogous to ancient and modern British and other gold mines. From a modern British gold mine we have seen a bar of gold obtained, weighing 7 lbs. Some of the samples from the mine under notice, the "Cwmheisian," on the River Gain, near Dolgelly, Merionethshire, exhibited in case 490, have the gold visible thereon. It is known that gold does exist in the Welsh, Cambrian, Cornish, Irish, and Scotch mountains, in proportions sufficient to render its separation from the quartz, or still more frequent intermixture of blende, pyrites, galena, copper ore, &c., a profitable occupation. It is pretty certain that the Romans, when in Britain, were more careful in this respect than modern adventurers in mining operations, notwithstanding our boasted superiority of modern knowledge; for Tacitus, in his *Life of Agricola*, expressly states the occurrence of gold and silver in Britain, "*fert Britannia aurum et argentum et alia metalla pretium victoriæ.*"

The Roman method of obtaining gold from auriferous ores was similar to that pursued at the present day—viz.: the ore was broken, washed, turned, ground to powder, and pounded *with pestles (quod effossum est, unditur, lavatur, teritur, molitur in farinam, ac pilis cuditur).* The recent researches of the Geological Survey have discovered that this remarkable people worked a gold mine at Gogofan, near Pumpsaint, Carmarthenshire. It had long been matter of surprise to previous observers, that iron pyrites was the only visible ore at these somewhat extensive ancient workings, yet there existed large heaps of apparently pure quartz, carefully broken; amongst the latter, a member of the Geological Survey found a single specimen, with the gold visible, which is now in the Museum of Practical Geology. The geological formation and general character of the rock at the ancient gold mine at Gogofan is similar to the more modern one at Cwmheisian, in Merionethshire, and the still more remarkable auriferous district in California.—*Morning Post.*

TO BUILDERS, &c.—PERSONS desirous of TENDERING for the ERECTION of the BUILDERS' WORK for the NEW MARKET HOUSE, BOLTON, can INSPECT the DRAWINGS, and obtain printed Specifications and Quantities at the office of the architect, Mr. G. T. Robinson, 2, Castle-street, Wolverhampton, from Monday, the 7th July, until Wednesday, the 16th July; and at the offices of the Town Clerk, Bolton, from Thursday, the 17th July, until Thursday, the 31st July. 49
Sealed tenders to be delivered on or before the 1st of August, at the offices of Mr. J. Knowles, Town Clerk, Bolton.

TO IRONFOUNDERS, &c.—PERSONS desirous of TENDERING for the ERECTION of the IRONWORK for the NEW MARKET HOUSE, BOLTON, can INSPECT the DRAWINGS, and obtain printed Specifications and Quantities at the offices of the architect, Mr. G. T. Robinson, 2, Castle-street, Wolverhampton, from Monday, the 7th July, until Wednesday, the 16th July; and at the offices of the Town Clerk, Bolton, from Thursday, the 17th July, until Thursday, the 31st July. 49
Sealed tenders to be delivered on or before the 1st of August, at the offices of Mr. J. Knowles, Town Clerk, Bolton.

DEVON HAYTOR GRANITE COMPANY.—Notice is hereby given, that NO FURTHER APPLICATION for SHARES in this COMPANY will be RECEIVED after TUESDAY, the 15th day of July, 1851. 50
By order of the board, ALEX. W. POLLOCK, Purser and Secretary.
59, King William-street, City, July 5, 1851.

GREAT BRYN CONSOLS COPPER AND TIN MINE, 51
Situate in the parish of WITHIEL, near BODMIN, CORNWALL.
Applications for the remaining shares to be made to the Committee of Management; or to Mr. Lelean, No. 5, Crosby-hall Chambers, Bishopsgate-street, London.

CHYPRASE CONSOLS MINE, situated in the Parish of ST. ENODER, CORNWALL.—APPLICATIONS for the FEW REMAINING SHARES to be made to the Purser, Mr. Thomas Lewis, 17, New Meeting-street, Birmingham; or to Augustus Yeates, Esq., solicitor to the Company, 77, New Hall-street, Birmingham; and of the following sharebrokers:—Messrs. Trevarton and Co., No. 5, St. James's-street; Mr. Henry Boxall and Co., 7, George-yard, Lombard-street, London; Mr. J. Jury, 3, Castle-terrace, Exeter; Mr. John Davis, mining sharebroker, 38, Tower-buildings, Liverpool.—Prospectuses may be obtained of either of the above parties. 52

OKEL TOR SILVER-LEAD MINE.—The Promoters of this Mine being desirous that it should be carried out in a legitimate and business-like manner, with the spirit of prudence and economy, have made ARRANGEMENTS with Mr. EVAN HOPKINS to FORWARD regular COPIES of the RECORDS of their PROCEEDINGS to his OFFICE, 13, Austinfriars, in order that this Gentleman may not only from periodical inspection, be able to judge of their progress, but be made acquainted also with their daily operations, for the satisfaction of distant capitalists who may consult him.
There are a few shares remaining for disposal, applications for which must be made to Mr. J. JURY, the secretary, 3, Castle-terrace, Exeter. 53

FFRWD MINE,—Near LLANRHYSTID, nine miles from Aberystwith, CARDIGANSHIRE.—The above work has been driven about 40 yards cross-cut, to carry out the water; and 14 yards driving on the vein, which runs from east to west, with every prospect of proving an excellent speculation as a LEAD MINE. It is but one mile from the sea, and the river runs through the dingle in which it is situated. It is now offered to adventurers upon conditions proposed by the Earl of Lisburne and Pryse Loveden, Esq., M.P.—Specimens of the ore may be seen at the office of the *Mining Journal*, 26, Fleet-street, London; and for further particulars apply to Mr. Wm. Davies, Ffrwd, Llanrhystid, near Aberystwith. 54

GALLT-Y-MAEN SILVER-LEAD MINING COMPANY,
LORDSHIP OF MOWDDWY, COUNTY MERIONETH.
NOW IN WORK ON THE COST-BOOK PRINCIPLE. 55
In 12,000 shares, of £3 each.
Deposit £2 per share, to be paid upon transfer.—No further call to be made, unless with the consent of the shareholders in General Meeting assembled.

COMMITTEE OF MANAGEMENT.

A. A. DORIA, Esq., Lincoln's Inn.
WILLIAM WATSON JEFFREY, Esq., 4, New Broad-street.
JAMES T. KIRKWOOD, Esq., Woodland-terrace, Greenwich.
CHARLES MAPLESTONE, Esq., 27, Bucklersbury.
HENRY MOSS, Esq., 3, Church-court, Clement's-lane.
(With power to increase their number.)

Manager of the Mines.—Mr. Charles Samuel Richardson, 15, Old Broad-street.
Solicitor—Edward Maniere, Esq., 2, Scott's-yard, Bush-lane.
Bankers—Messrs. Martin, Stone, and Martins, Lombard-street.
Broker—John Guillemard, Esq., 3, Bartholomew-lane.
Purser—Austin Edwards, Esq., Brook-green, Hammersmith.
OFFICES,—3, SHERBORNE-LANE, LONDON.

The Gallt-y-Maen sett extends over about 224 acres of rich mineral land, and is situate in the lordship of Mowddwy, in the county of Merioneth; it is held under lease from the lord of the said manor, at a royalty of 1-14th, for a term of 21 years, and a sleeping rent of £100 per annum.
Gallt-y-Maen is in the vicinity of the celebrated Great Cowarch Silver-Lead Mine, which is producing large quantities of ore, yielding 70 to 80 per cent. of lead, in addition to a considerable quantity of silver.
Prospectuses and all other information to be had upon application at the Offices of the Company; or to John Guillemard, Esq., Stock Broker, 3, Bartholomew-lane.
Offices, 3, Sherborne-lane, City.

GALT-Y-MAEN SILVER-LEAD MINING COMPANY.—The COMMITTEE will NOT RECEIVE APPLICATIONS for SHARES in this COMPANY after the 14th inst., when the Scrip Certificates will be issued in exchange for the bankers' receipts.—3, Sherborne-lane, City, July 2, 1851. 56

TRENAULT LIME QUARRIES COMPANY,
6000 parts, or shares, of £1 1s. each.
CONDUCTED ON THE COST-BOOK PRINCIPLE, 57
Which exempts shareholders from any liability beyond the amount of their shares, and enables them to withdraw at any time by giving notice to that effect.
Prospectuses, containing the Rules and Regulations in full, Maps, and every information, may be obtained at the offices, 30, Bucklersbury. JAMES A. MAY, Purser.

TRENAULT LIME QUARRIES COMPANY.—Notice is hereby given, that a GENERAL ALLOTMENT of SHARES will TAKE PLACE on THURSDAY, the 24th July inst.—Applications for the few remaining shares must be made on or before that day.—30, Bucklersbury, London. 58

LIVERPOOL COLLEGE OF CHEMISTRY,—Recognised by all the London Medical Examining Boards, and the Apothecaries' Hall of Ireland.
Professor—Dr. SHERIDAN MUSPRATT, F.R.S.E., &c.
ANALYSIS and ASSAYS, sent to the above address, will receive IMMEDIATE ATTENTION.—Fees for Analysis, and for Students working in the Laboratory, may be had on application at the College. 59
Apothecaries' Hall, London, May 1, 1851.
At a Court of Examiners, held this day, it was resolved,—That the Royal College of Chemistry, London, and the College of Chemistry, Liverpool, be for the future recognised as Schools of Practical Chemistry, subject to the Regulations of this Court.
(Signed) HENRY BLATCH, Secretary.

ST. AGNES BEACON TIN AND COPPER MINE,
CORNWALL.—Capital £2628, in 2500 shares, of £1 1s. each.
ON THE COST-BOOK SYSTEM, 60
And in conformity to the Stannary Laws; held under the Duchy of Cornwall for 21 years at 1-15th royalty.
To be governed by a committee, selected by the shareholders, in preference to a self-constituted board of directors.

The parties bringing this concern before the public can safely refer to any of the mining agents around the parish of St. Agnes; they do so rather than offering any recommendatory reports they might themselves produce. The locality was thus described in the *Ancient History of Cornwall* half a century ago:—

"*Ancient Mining for Tin at St. Agnes Beacon.*—In St. Agnes,' about four miles from Redruth, is a vast entrenchment, which, from the greatness of the undertaking, the judgment evinced in the design, the straightness of the lines, and the uniformity of the works in all its parts, seems to be entirely of Roman origin, and to have been intended to protect the tin mines in the neighbourhood, which are obviously of great antiquity. On the top of the hill, to the west of three sepulchral barrows or tumuli (one of which was a beacon), are the remains of a small square fortification; to the south of this is a great rock, called Garder 'wolla,' or 'the lower.' At the bottom of the hill is the vast entrenchment before alluded to, which is nearly two miles in length, enclosing the whole of the Duchy manor of Trevaunance, which is more than 1000 acres of land. The fosse is in most places entire, though its height is unequal, being in some places only 6 feet, in others 12, and some as high as 20 feet. The ditch is nearly 20 feet broad, of which part forms a highway, and part is now occupied by orchards and gardens. The people call this the Gorres (or girdle), because it surrounds the hill, and state it to be the work of a giant called Bolster, or Bolla-ster (land entrenched or cast up), who is said to have compelled St. Agnes to gather up stones, and carry them in her apron to form the barrows, which she performed in three journeys only! The tower was of pyramidical form, to the height of more than 500 feet above the level of the sea. Though its surface in general is uninviting, yet, to use Norden's words—'The riches concealed in these Cornish rockes argueth Gode's high blessinge, whereof if use be not made, it may argue neglecte of the fruits of his providence.'"

The workings since have been on the course of the Bolster lode, at the adit level, through some fathoms of a shoot of ironstone; the present end west is driving in a fine channel of country, and showing good tin; a new shaft has been sunk down upon it from surface. Eastward the lode is 4 feet wide, containing branches of tin, mixed with copper and mundic. About 25 fathoms west there is a cross-course, by driving upon the run of which nine lodes will be cut through and explored east and west. In the adjoining and parallel mines great quantities of metal have been risen at similar intersections of the various lodes near the same cross-course.

About £3000 worth of work has already been completed, which this company avail themselves of. The present party, few in number, have expended one-half that sum, and only receive that amount (in shares and money), asking no premium; nor is there any debt or liability upon the concern. It has been a private adventure. A sufficient number of labourers are at work in the adit, making preparations for a larger body of them, which will be employed as soon as the present arrangement for increasing the capital is effected.

No steam-engine will be necessary, or other expensive machinery; the additional capital now required is only £1000. A considerable portion of the shares are already subscribed for, the remainder will be distributed to the earliest respectable applicants, who will be entitled to their full proportion of all the profits that may be derived from the workings from the date hereof.

Applications, in the usual form, with references, will be received until the 19th inst., by F. W. Pike, Esq., 26, Bedford-row; Mr. E. O. Parkinson, 2, George-yard, Lombard-street; and John Morgan, sworn broker, 2, Copthall-court, London,—where plans and reports may be inspected.—Dated July 9, 1851.

WHEAL GATE-POST (COPPER).
IN THE TAVISTOCK DISTRICT.
CONDUCTED ON THE COST-BOOK SYSTEM. 61
In 4000 shares.—Dues 1-15th.

This extensive and valuable sett, which, so far as surface indications are concerned, is allowed by all practical men who have inspected it, to offer inducements rarely equalled to persons desirous of speculating in mines, is situate in the parish of Whitchurch, in the county of Devon, about two miles east of the town of Tavistock.
The appellation given to this mining sett arose from the discovery of a "gate-post" in one of the fields, weighing about 12 cwts., which was found by assay to contain upwards of 30 per cent. of fine copper; and several other large blocks, of a similar quality, weighing upwards of 3 cwts. each, also found in the hedges on the same grounds.
In opening the ground by costeaning, &c., several lodes and cross courses have been discovered, the nature of which have so thoroughly satisfied the proprietors, that they have hitherto abstained from making reports in the usual way, and also from publishing any of the numerous favourable and sanguine opinions given by the agents of other mines in the district, who are daily attracted to the workings; and they have adopted this course from a desire that any persons wishing to become interested in the adventure should either make a personal survey, or cause an inspection to be made by some practical agent in whose judgment they have confidence, so that they may satisfy themselves, through their own source, as to the legitimacy of the undertaking.
Any further particulars can be obtained by application to the proprietors, Mr. John White, of the Tavistock Brewery; or Mr. Michael Whitburn, mine agent, Tavistock.

ED. J. DENT has REMOVED from 82 to 61, STRAND, and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above, also at 33, COCKSPUR-STREET and 34, ROYAL EXCHANGE (Clock Tower area). 62

LAW OF LETTERS PATENT FOR INVENTIONS.
This day is published, price 6s., cloth boards, 63
A TREATISE ON THE SUBSTANTIVE LAW RELATING TO LETTERS PATENT FOR INVENTIONS. By HENRY LUND, Esq., of Trinity College, Cambridge, M.A., and of Lincoln's Inn, Barrister-at-Law.
S. Sweet, 1, Chancery lane, London, law bookseller and publisher.

NOW READY, PRICE SIX SHILLINGS.
Under the immediate Sanction and Patronage of his H.R.H. PRINCE ALBERT, K.G., Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c.
THE MINING MANUAL AND ALMANACK FOR 1851,
Being a Yearly Compendium of INFORMATION on GENERAL SCIENCE, with Tabular and other Statistical Details relating to the MINING INTERESTS.—Compiled and arranged by HENRY ENGLISH, Mining Engineer. 64
London: Simpkin, Marshall, and Co., Stationers'-court; at the office, 25, Fleet-street; and at the office of the *Mining Journal*, 26, Fleet-street.
[A detailed list of the contents will be published in next week's *Mining Journal.*]

BY HER MAJESTY'S ROYAL LETTERS PATENT.
THE PROCESS OF ICE BEING MADE IN ONE MINUTE
without the aid of Ice, has elicited from Her Majesty, at the Grand Exhibition her most gracious approval and unbounded astonishment, by 65
MASTERS & CO.'S PATENT FREEZING MACHINES,
which are now brought to the highest state of perfection; as also are the various MACHINES enumerated below:—
MASTERS'S PATENT FREEZING MACHINE, for making Dessert Ice and Rock Ice from Spring Water, and for Cooling Wine, &c., at a trifling cost.
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MASTERS'S PATENT SHERRY COBBLER FREEZING and COOLING JUG, for producing pure Ice from Spring Water in five minutes, at the cost of 2d., in the hottest climate.—Price 30s. and upwards.
COOLING DECANTER, or CLARET JUG.—COOLING and FREEZING FILTERER.
COOLING CUP, for Surgical purposes, &c. &c. &c.
The PUBLIC is respectfully INVITED to SEE the PROCESS of MAKING ICE, by the above machines, without the aid of Ice—the same process as exhibited by Mr. Masters to Her Majesty, at his Refreshment Rooms, at the Crystal Palace, where 100 quarts of Desert Ice, and large cylinders of Rock Ice are made daily—at Messrs. MASTERS & CO.'S principal DEPOT, 309, REGENT STREET, adjoining the Polytechnic Institution, London.
MASTERS & CO.'S PATENT SODA WATER and AERATING APPARATUS, for charging Water, Wine, Ale, and other Liquids, with pure Carbonic Acid Gas. By this apparatus the purest Soda Water may be obtained at the cost of less than one farthing per glass; and so delicate is the operation, that it may be used in the dining-room. By the addition of the Jargonelle Pear Syrup, manufactured by Messrs. Masters & Co., the most delicious effervescing beverage is produced. Price 30s., and upwards.
N.B.—Syrups from all Fruits, for flavouring Soda Water, making Lemonade, Ices, &c.
Also, MASTERS & CO.'S PATENT ROTARY KNIFE-CLEANING MACHINE, manufactured in six different sizes, to clean and brilliantly polish Six to Twelve Knives in One Minute. Warranted to last many years, and not get out of order.—Price 35s. to 6*l.* 6s.
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Adjoining the Polytechnic Institution, London.

IMPROVED LIFTING JACKS, 66
MANUFACTURED BY
W. AND J. GALLOWAY,
PATENT RIVET WORKS,
MANCHESTER.
The attention of parties who employ
Lifting Jacks,
is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPROVED RATCHET JACK. HALEY'S PATENT LIFTING JACK.


VAUXHALL—SCOTTISH FETE and BALL on TUESDAY NEXT, JULY 15th, in AID of the FUNDS for the RELIEF of FAMINE in the HIGHLANDS and ISLANDS, under the Patronage of the HIGHLAND SOCIETY of LONDON, of which His Royal Highness Prince Albert is Chief; Capt. Charles Forbes, of Aslown, Charles Mackenzie, Esq., of Scotsburn, John Baillie, Esq., and the Scottish Nobility and Gentry resident in London, for the RELIEF of FAMINE in the WEST HIGHLANDS and ISLANDS, when several Prizes will be given for the best Competitors on the Highland Pipes, Highland Dancing, Tossing the Caber, Throwing the Hammer, Putting the Stone, Fencing, &c., after which a Scottish Concert of Vocal and Instrumental Music will take place in the Orchestra; and at the conclusion of the usual Performance in the Gardens, a Grand Highland Ball will take place in the Large Ball Room, which will be thrown open for the occasion without Extra Charge. The Gardens are open at Eight Every Evening, with Grand Galas; on SATURDAYS at Seven. On MONDAY and TUESDAY, JULY 21st and 22d, FANCY FAIRS and FETES in AID of the FUNDS of the LICENSED VICTUALLERS' SCHOOL; Doors Open at Five on the above Fete Days. On THURSDAY, JULY 24, another of those Grand Bal Costumé and Masquerades for which these Gardens have now become so celebrated. Mr. J. Nathan is appointed Costumier. 67

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
5120	Alfred Consols (copper), Phillack	3	£1 1 to 5th April	£0 6 0 May	15½ 16½ 17	16 15
1248	Allt-y-Crib (silver-lead), Talybont, Wales	5	—	0 2 6 ,,	10	
1624	Balleswidden (tin), St. Just	11½	8 11 to June	0 5 to June	10	
4000	Bedford United (copper), Tavistock Devon	2¾	2 12 to June	0 4 to June	7¼ 7½	7¼ 7¾ 7½
64	Boscaswell Downs (tin), St. Just	—	750 0 to May, 1849	—	100	
100	Botallack (tin and copper), St. Just	182½	440 0 to 5th April	5 0 to May	205 210	
1000	Bryntail, Llanidloes, Montgomeryshire	2½	0 5 to end June	0 5 to June	17½ 18	16 17
1000	Callington (lead and copper), Callington, Devon	28	6 0 to Sept., 1847	—	6½	
1000	Carn Brea (copper and tin), Illogan	15	202 0 to June, 1851	2 0 to June	105	
1024	Chyprase, St. Enoder (tin and copper), Cornwall	3½	2 6 8 —	—	6½	
128	Comford (copper), Gwennap, Cornwall	65	—	—	50	
256	Condurrow (copper and tin), Camborne, Cornwall	20	11 0	—	105	
1024	Devon Great Consols (copper), Tavistock	1	224 10 to March	8 0 to May	300 305	300 305
180	Dolcoath (copper and tin), Camborne	252	855 14 to 1847	—	16	
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24½	233 0 to 1843	—	176	
94	East Wheal Crofty (copper), Illogan, Cornwall	125	242 10 —	—	120	
128	East Wheal Rose (silver-lead), Newlyn	50	295 0 to 5th April	15 0 to May	550	
494	Fowey Consols (copper), Tywardreath	40	—	—	30	
3750	General Mining Company for Ireland (copper)	1½	35 per cent. to June	10 per ct. ½ year	5½	
100	Goginan (lead), Cardiganshire, Wales	5	440 0	—	200	
96	Great Consols (copper), Gwennap, Cornwall	1000	353 6 8 to January	—	200	
119	Great Work (tin), Germoe	100	110 0 to June	7 10 to June	200	
1024	Herodsfoot (lead), near Liskeard, Cornwall	8	—	0 5 ,,	7	5 7
1000	Holmbush (lead and copper), Callington	24	25 0 to Feb., 1844	Feb., 1844	14½ 15½	
1000	Lewis (tin and copper), St. Erth	17	1 0 to 9th Feb.	0 10 to April	20 21	
160	Levant (copper and tin), St. Just	2½	1030 0 to 5th June	5 0 to June	160	
100	Lisburne (lead), Cardiganshire, Wales	75	620 0 ,,	20 0 ,,	700	
20000	Mining Company of Ireland (copper, lead, and coal)	7	7 10 6 to Feb., 1847	7 p. ct. p. annum	4½	
200	North Pool (copper and tin), Pool	22½	195 0 to 4th April	7 10 to June	245	240
140	North Roskear (copper), Camborne	10	150 0 to February	2 10 to May	155	
6000	North Wheal Basset (copper and tin)	½	1 1 to 5th April	—	13	
128	Par Consols (copper), St. Blazey	55¾	374 0 —	—	650	
1160	Perran St. George (copper and tin)	21½	1 15 to June	0 10 to 4th June	40	
560	Providence Mines (tin), Uny Lelant	20½	11 17 to February	1 0 to May	25	
256	South Caradon (copper), St. Cleer	2½	250 0 ,,	2 10 ,,	135 132½	132½
256	South Tolgus (copper), Redruth, Cornwall	16	24 0 to 5th June	2 10 to June	160	160
248	South Wheal Frances (copper), Illogan	80	95 15 to 10th July	6 0 0 to July	260	
1024	Spearne Consols (tin), St. Just, Cornwall	1½	3 7 6 to June	0 12 6 to June	11½	9½ 10½
94	St. Ives Consols (tin), St. Ive's	80	851 0 to February	5 0 to May	80	
1000	Stray Park and Camborne Vean (copper), Cornwall	15	11 10 —	—	15 15½ 13	
9600	Tamar Consols (silver-lead), Beeralston	4	2 11 to July, 1847	—	4½ 4¾	4½ 4¾
6000	Tincroft (copper and tin), near Pool	7	5 17 6 to Sept.	—	7 7½	7½ 7¾ 8½
256	Trehane (silver-lead), Menheniot	1½	24 15 to January	1 0 to May	15½ 16	
5000	Treleigh Consols (copper), Redruth	6	—	—	2½	
96	Tresavean (copper), Gwennap, Cornwall	20	4680 15 to 1848	—	220	
120	Trethellan (copper), Gwennap, Cornwall	5	402 10 to 5th April	—	14	
120	Treviskey and Barrier (copper)	130	221 15 ,,	8 10 to May	195 200	210
1024	Wellington (copper & tin), Perranuthnoe	6½	2 2 6 ,,	0 5 to March	7	
256	West Caradon (copper), Liskeard, Cornwall	20	155 5 to February	2 10 to May	110 107	
512	West Providence (tin), St. Erth	10	—	—	87½	90
256	Wheal Basset (copper), Illogan	10½	235 0 to 3d June	10 0 to 3d June	392½	
256	Wheal Brewer (copper), Gwennap, Cornwall	2	5 0 —	—	6½	
128	Wheal Buller (copper), Redruth	10	142 10 to 5th April	25 0 ,,	1050	
126	Wheal Friendship (copper) Devon	120	2325 10 —	—	120	
4000	Wheal Golden (lead), Perranzabuloe	2	0 10 to March	0 5 to May	7½	
430	Wheal Lovel (lead and tin), Helston	—	4 0 to 5th April	2 0 to June	20	
112	Wheal Margaret (tin), Uny Lelant	79	179 0 to March	3 0 to May	135 140	
512	Wheal Mary Ann (lead), Menheniot	5½	18 5 to 21st May	3 0 to May 21	59 60	60 58
40	Wheal Owles, St. Just, Cornwall	200	—	—	235	
240	Wheal Reeth (tin), Uny Lelant	20½	22 10 to February	2 10 to May	87½ 90	
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	190 10 to 5th April	5 0 to April	200	
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	3½	26 10 ,,	2 0 to May	52	56
1024	Wheal Tremayne (tin and cop.), Gwinear, Cornwall	9½	4 15 to June	0 10 to June	23½	24 23½
5200	Wicklow (copper), Wicklow	5	—	20 p. ct. end Feb.	20½	24½

FOREIGN MINES.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
[illegible]	Alten Mining Company (copper), Norway	14½	3 0 0 to Mar., 1848	—	3	
10000	Brazilian Imperial (gold), Brazil	24½	3 17 6 to Dec., 1844	—	2¾ 3	
12000	Cobre Copper Company (copper), Cuba	40	45 10 0 to Jan., 1851	3l. to January	39¾	40½
10000	Copiapo Mining Company (copper), Chili	14	3 3 0 to Oct., 1850	8s. to Oct., 1850	6¾ 6¾ 7	
20000	General Mining Association (iron & coal), Nova Scotia	20	6 10 0 to June, 1851	10s. June, 1851	14	
2700	Marmato (gold), Columbia	2½	2 0 0 to June, 1851	1l. to June, 1851	12	
5051	Mexican Company (silver), Mexico	59½	0 8 6 end of 1846	4s. in 1846		
7000	Royal Santiago (copper), Cuba	10	33 4 0 to July, 1846	—	5	5
11000	St. John del Rey (gold), Brazil	15	12 17 6 to Dec., 1850	1l. 10s. to June 7	18½	18¾ 18½
43174	United Mexican (silver), Mexico ... Av.	28½	1 12 6 to Feb. 1851	7s. 6d. Feb., 1851	2¾	2¼ 3

Shares.		Paid.	Last Price.	Present Price.
1024	Appledore (silver-lead and cop.) St. Ives	2½	3	
940	Balnoon Consols (tin), Uny Lelant	—	3½ 4	
5000	Bargally (lead), Cairnsmore	—	1	
905	Barristown (lead), Carrick	5¾	5	
3650	Bawden (silver-lead) St. Teath	¾	½	
256	Berriow (copper), Liskeard	2½	3 3½	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
32	Black Burn, Alston, Cumberland	20	100	
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
8000	Blaenavon (iron), South Wales	50	12½	
1024	Bodmin Consols (lead), Wadebridge	5	5 6	5
5000	Bodmin Moor Consols (tin and copper)	1	5½ 5½	
1024	Bodmin Wheal Mary (copper), Bodmin	8	9 10	
6000	Bolenowe	2½	4½	
40	Bolowall and Nanpean (tin), St. Just	—	20	
1024	Boringdon Park (silver-lead), Plympton	1	5	
240	Boscean (tin), St. Just	12½	12½	10
2400	Bosorn (tin), St. Just	1	2	
1024	Bottle Hill (copper) Plympton	1	1½	
256	Bridford Consols	1½	1	
10000	British Iron, New, regis. (iron)	12	8	
—	Ditto ditto, scrip	10	10	
2000	Bronfloyd (lead)	1	1½ 1¾ 1½	
2400	Bryn-Arian (lead), Cardiganshire	2	2	1½
107	Budnick Consols (tin), Perranzabuloe	52½	3 4	
812	Butterdon (lead), Menheniott	3½	7	
2000	Bwlch Consols (silver-lead), Cardiganshire	4	4 4½	
1000	Cae-Gynon (silver-lead), Cardiganshire	½	4¾	
4000	Calstock United (copper)	5	5 6	
3000	Cally (copper and lead), Kirkcudbrightsh.	1	1½	
1000	Camborne Consols (copper), Camborne	7	4 5	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	2¾	1¾	
1000	Carbona (tin and copper), Crowan	5	5	
512	Carn Galver, Morvah	1½	3	
5120	Carn Valley, St. Dennis	1	2	
3000	Carthew Consols (cop. & lead), Wadebridge	4¾	6	
1056	Carvannall (copper), Gwennap	3	5	16 15
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	5½ 6	
200	Cefn Bruno (lead), Cardiganshire	13	54	
5000	Cefn Gwyn (silver-lead), Cardigan	1	1½	
1024	Clijah and Wentworth (tin & co.), Redruth	1½	5	
2510	Cook's Kitchen (copper and tin), Illogan	15½	8	7½ 5
1000	Copper Bottom (copper), Crowan	7	8	
900	Court Grange (silver-lead), Cardiganshire	10	12	
211	Craddock Moor (copper), St. Cleer	29	9½	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont.	8½	10½	
256	Crane and Bejawsa (copper), Camborne	20	30	
1000	Cwm Daren	1	3	
1000	Cwm Erfin (lead), Cardiganshire	6	3½ 4	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	100	
2000	Cyfannedd Fawr (lead), Lanegryn	½	½	
3000	Dairhiew (copper and lead), Brecon	1½	10	
1000	Daren (silver-lead), Cardiganshire	2	7	
7100	Derwent (silver-lead), Durham	10	3	
5000	Devon Consols North (cop.), Lamerton	2½	4	
4160	Devon and Courtenay Consols (copper)	1¾	1½ 2	1½
768	Devon Great Tincroft, North Bovey	½	6	
1000	Dhurode (copper) Ireland	2	5	
672	Ding-Dong (tin), Gulval	5	7 8	
4000	Dolfrwynog (copper), Merioneth	½	½	
2560	Drake Walls (tin and copper), Calstock	6½	5	
128	Drift Moor (tin), Sancreed	1	1½	
1536	Duke of Cornwall (copper), St. Winnon	1	2	
8000	Dyfngwm (lead)	10	10	
1024	East Balleswidden (tin), Sancreed	2	2 2½	
256	East Basset (copper) Redruth	10	17	
2500	East Birch Tor, (tin), near Ashburton	3	3	
2048	East Boringdon Park, Plympton	½	¾ 1	
1024	East Buller (copper), near Redruth	3	4½	
128	East Carn Brea (copper), Redruth	4	3	
2048	East Crowndale (tin), Tavistock	7½	3	
300	East Daren (lead), Cardiganshire	13	30	
256	East Godolphin (copper), Crowan	17½	21	
4000	East Gunnis Lake Junction (copper)	½	2	
256	East Seton and Wheal Maude, Redruth	4	1¾	
9000	East Tamar Consols (sil.-lead), Beerferris	1½	1	
256	East Tolgus (copper), Redruth	4	10½	
1000	East Trescoll	1	2½ 3½	
256	East Tywarnhayle (copper), St. Agnes	14	5	
256	East Wheal Frances (copper), Illogan	6½	8	
2048	East Wheal George (cop.), Walkhampton	1	10	
2048	East Wheal Josiah (copper), Tavistock	1½	¾	
512	East Wheal Leisure (copper)	9	18 17	18
1024	East Wheal Margaret (tin and copper)	½	1½ 1½	
3000	East Wheal Rashleigh, Lanreath	2s	3s 6d	
1000	East Wheal Reeth	1½	1½	
4000	East Wheal Russell (copper), Tavistock	8s 6d	5	
1280	Esgair Llee Llanfihangel-y-Croythin	4½	5½ 6	
1024	Exmoor Eliza (copper), South Molton	4½	3	
6000	Forest (copper and silver-lead), Devon	1½	1	
1024	Freidd Llwydd Mines (lead)	1½	3½	
2560	Garras (silver-lead), near Truro	5½	2½ 3	
5000	Garreg (lead), Flint	—	1½	1½
1000	Gelli-rei-vin (silver-lead), Cardiganshire	1	5	
2500	Georgia Consols (tin), St. Ive's	2½	7 7½	

Shares.		Paid.	Last Price.	Present Price.
256	Gonamena (copper), St. Cleer	46	12	
243	Grambler and St. Aubyn (copper)	84	34 35	
6500	Great Bryn Consols (copper and tin)	1	1	
2000	Great Cowarch (silver-lead), Merioneth	2	3 3½	
11000	Great Polgooth (tin), St. Austell	3	3½	
1024	Great Sheba Consols (tin and copper)	6	6½	5 6
1024	Great Wheal Alfred, St. Erth and Phillack	4	4 4¾	
5120	Great Wheal Baddern (tin and silver-lead)	2	5	
5000	Great Wheal Martha (cop.), Stoke Clims.	—	¾ 1	
512	Great Wheal Rough Tor Consols (copper)	29	20	
6000	Growa Slate Company, Camelford	5	5	
1026	Gustavus Mines (copper), Camborne	6½	6	
512	Hawke's Point (copper), Uny Lelant	8½	3½ 4	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	7½	6	
6000	Heignston Down Con. (copper), Calstock	2½	1	
32	Helvellin Mining Company, Westmoreland	20	30	30
1500	Hennock (silver-lead), Hennock	2¾	2	
10000	Hibernian (copper) Ireland	12½	¾	
20000	Kenmare and West of Ireland (copper)	1	2	
1900	Keswick (lead), Portinscale, near Keswick	11	2 3	
1024	Kingsett and Bedford (lead and copper)	4½	2	
786	Kirkcudbrightshire (lead), Kirkcud.	9¾	4	4
1024	La Min (Gwinear), tin and copper	3½	6½	
1742	Lamherooe Wheal Maria (copper & tin)	12	15	12
5000	Lampen Consols (copper), St. Neot	1	1	
252	Lanarth Consols (copper), Gwennap	4	5 6	
256	Lelant Consols (tin), Uny Lelant	57	22	
13000	Llwynmalees (lead), Cardiganshire	1	1	
3600	Llynvi Iron (iron)	50	50	
5000	Low's Patent Copper Company	7	10	
6000	Marke Valley (copper), Caradon	10	3½	
5000	Mendip Hills (lead), near Bristol	3¾	2½	
5000	Merllyn (lead), Flint	2½	4	
1024	Mill Pool (tin and copper), St. Hilary	1	4	
256	Mineral Court (tin), near St. Austell	25½	30	30 35
1024	Moditonham & Marrabro' (copper & lead)	2½	2½ 3	
2000	Molland	1	1 1½	
1024	Montgomery (lead and copper)	8	11	
160	Morvah Consols (tin and copper)	2	3	
320	Nansegollan (tin and copper), Camborne	3	3½ 4	
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	2	10	
5000	New Copper Bottom (copper) Bridestowe	1½	1½	
2048	New East Crowndale (copper and tin)	1½	¾	
1024	North Buller (copper), Redruth	5	13	14 15
2000	North Downs (copper), Redrnth	½	1	
256	North Fowey Consols	—	25	
2000	North Levant (tin and copper), St. Just	1½	3	
2000	North Tamar (silver-lead & copper) Devon	2	2½	2½ 2½
256	North Trefusis (tin and copper), Redruth	1	1	
1200	North Wh. Buller, or Gt. South Tolgus	5	14	
256	North Tolgus (copper), Redruth	9	10½	
262	North Wheal Leisure, Perranzabuloe	1½	1½	
1024	North Wh. Robert (copper), Walkhampton	2	2	
2048	Okel Tor (lead)	½	½	
512	Old Brimpts (tin), Lydford, Ashburton	¾	10	
256	Old Wheal Basset (copper), Redruth	1	2¾	
1026	Pendarves Consols (copper), Camborne	3½	6	
1000	Pendarves and St. Aubyn (tin and copper)	5	11	
406	Penhauger	1	3	
4934	Pennant and Craigwen (lead)	3	3½	
1000	Penrait	1	3 3½	
2048	Pentire Glaze (silver-lead), St. Minver	5½	5½ 7	
700	Pen-y-bank and Erglodd (lead)	4½	5	5
1024	Penzance Consols (tin), Sancreed	2½	1½	1½
1000	Peter Tavy and Mary Tavy (copper)	3½	15 20	15 19
200	Phœnix (copper and tin), Linkinghorne	—	240	
2048	Plymouth Wh Yeoland Con. (tin), Plym.	1½	5	
1000	Polberro (tin), St. Agnes	15	15	
2000	Polgear (copper and tin)	1	3	
1024	Praed Consols (tin), Towednack	1½	1l 1s	
1024	Prince Albert (tin), Perranzabuloe	1	1	
2500	Rhoswydol and Bacheiddon (lead)	10½	6	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
5000	Rocks and Treverbyn (tin), St. Austell	4½	4½	
2048	Runnaford Coombe (tin)	3	¾	
1024	Sidney Godolphin (copper), Breage	3½	3¾	
2048	Snowdon (copper), Carnarvonshire	3	3	
2000	South of Scotland	1½	1	
2000	South Carn Brea (copper), Illogan	10	8½	
256	South Friendship Wh. Ann (copper & tin)	30	28 30	
1024	South Plain Wood (copper), Ashburton	4½	7¾	
300	South Speed (copper and tin), Uny Lelant	15	30	
9000	South Tamar (silver-lead), Beer Ferris	1	2½	2½
256	South Trelawny (lead), near Liskeard	33½	4	
2000	South Wales Mining Company (lead)	1¾	2½	
256	South Wheal Josiah (copper), Calstock	2	2	
280	Spearne Moor (copper), St. Just	30	40	
1024	St. Aubyn and Grylls (copper and tin)	3	5	4½
12000	St. Enoder (copper and lead) St. Enoder	1	1½	
999	St. Minver Consols (silver-lead)	1	5	
687	Tavy Consols (copper), near Tavistock	8½	1½	
128	Tokenbury (copper), St. Ive, Liskeard	8½	12	
1200	Tolcarne (tin and copper), Camborne	2½	3	
1024	Trannack and Bosence, St. Erth	1	8	
1024	Trannack United Mines (tin and copper)	1½	1¾	7¾
1024	Trebarvah, Perranuthnoe	1	5	

Shares.		Paid.	Last Price.	Present Price.
2048	Trebell Consols (tin and copper), Lanivet	1½	1¾	1¾
600	Tregardock (lead), St. Teath	1	5	
1120	Tregorden (silver-lead) Wadebridge	2¾	6	
1000	Treloweth, St. Erth	4½	6 7	
600	Trelyon Consols (tin), St. Ive's	4	5 6	
1024	Tremar (copper), Liskeard	1½	1½	
2000	Trenance (copper), Helston	6	5	
6000	Trenault (lime quarries)	21s	21s	
512	Trethevy (copper), St. Cleer	9½	5½ 5½	
512	Treville (lead), Lewanick	2¾	7	
604	Trowan Consols (tin), Towedneck	7	10	
100	Trumpet Consols (tin), near Helston	95	100 105	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4 5	
500	Tywarnhayle (cop.), Illogan & St. Agnes	60	31½	
512	Tywardreath (copper), St. Blazey	2	10	
1024	United Mines (copper and tin), Tavistock	10	10	
200	United Mines (copper), Gwennap	300	87½	
5000	Warleggan Consols (copper)	½	½	
1024	West Alfred Consols	7¾	17	17
5000	West Basset (copper), Illogan	½	7	
1024	West Beam (tin), St. Austell	14s 6d	1½	
256	West Damsel (copper), Gwennap	5½	55 57½	
1024	West Ding-Dong (tin)	½	3½	
1024	West Downs (copper and tin), Whitchurch	2½	3	
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
2048	West Goginan (silver-lead), Cardiganshire	1¾	3	
1020	West Nantymwyn	1	1	
1024	West Par Consols (copper), St. Blazey	10	11	
1024	West Phœnix, Linkinghorne	4	4	
12500	West Polgooth (tin), St. Ewe & St. Mewan	1	1	
200	West Seton (copper), Camborne	67	115 120	
256	West Sharp Tor (copper) Linkinghorne	22	49	
3000	West Shepherd (silver-lead and copper)	2½	2	
940	West Tolgus (copper), Illogan	14½	5	4½
120	West Trethellan (copper), Gwennap	15	20	
5000	West Wheal Alfred	1	1½	
512	West Wheal Frances (copper), Illogan	8	15	
4000	West Wheal Friendship (copper)	1½	1	
3715	West Wheal Jewel (tin and copper)	12	1½	
2048	West Wheal Rose	2	2	
4000	West Wheal Russell	½	¾	
500	West Wheal Towan (copper), Illogan	15	14 15	
1024	West Wheal Treasury (copper), Gwinear	8	4	
1024	West Wheal Virgin (tin), Sancreed	1¾	1½ 2	
1024	Weston (lead), Cherbury, Shropshire	¾	¾	
1070	Wheal Adams (lead), Christow, Exeter	13½	16	
1000	Wheal Agar (copper), Illogan	6	5½ 5½	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1228	Wheal Arthur (silver-lead & cop.), Calstock	1½	3 2½	3 3½
3072	Wheal Augusta (tin), St. Just	1	1½ 2	
240	Wheal Bal (tin), St. Just	5	16 17	
5000	Wheal Caradon (copper), St. Cleer	1	1	
256	Wheal Carpenter (tin), Gwinear	1½	6 7	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	2	3	
124	Wh. Castle and Boswedden (tin & copper)	5	20	
1024	Wheal Catherine (silver-lead), Liskeard	2½	2½	2½
1024	Wheal Chiverton (copper)	1	1 1½	
1024	Wheal Crebor (copper), Tavistock	3	5	
1024	Wheal Cupid (copper), Gwennap	1	1½	1¾
3000	Wheal Dora (tin and copper), St. Cleer	3¾	6½	
2048	Wheal Edward, Tavistock	½	1½	
182	Wheal Elizabeth (copper), Redruth	23	6	6
1024	Wheal Emily (antimony and lead)	3	5	
182	Wheal Ennis (lead), St. Erme	12	20	
1070	Wheal Enys (tin), Wendron	1½	1½	1½
1024	Wheal Fortescue (copper), Tavistock	5	1½	
764	Wheal Franco (copper), near Tavistock	14½	11	
100	Wheal Friendly (tin), St. Agnes	70	30	31½
1536	Wheal Gill (cop. and lead), Liskeard	2	—	
1000	Wheal Guskis (tin and copper), St. Hillary	½	1	
2048	Wheal Hamlyn, near Oakhampton	1	1	
2560	Wheal Harriet (copper), Camborne	1	⅞ 1½	⅞ 1½
2048	Wheal Harris (lead), near Tavistock	¾	1	
216	Wheal Henry (copper), Kea, near Truro	25	8	
6000	Wheal Langford (copper and silver-lead)	½	¾ 1	
2000	Wheal Langmaid (lead)	½	1	
1000	Wheal Lemon, Germoe	13s	¾	
1024	Wheal May (silver-lead and copper	2½	2¾	
990	Wheal Mary (copper), Redruth	16	6½	
1024	Wheal Mary Ann (copper), Bridestow	—	2	
1024	Wheal Mary Emma, Tavistock	1½	2	
1024	Wheal Neptune (copper), Perranuthnoe	2	3	
1080	Wheal Oak, near Helston	1½	1½	
3000	Wheal Penhale (lead and copper)	2½	4½	
128	Wheal Plenty (copper), Redruth	19	38 39	
128	Wheal Pollard (copper), St. Cleer	15¾	10	
210	Wheal Prospect	4	7	
5000	Wheal Providence, South Sydenham	½	3	
256	Wheal Prudence (copper), St. Agnes	2¾	4	
2048	Wheal Robins	½	1½	
4000	Wheal Russell (copper), Tavistock	1½	1½	
5000	Wheal Ruth (tin), Shepstor	2	2	
512	Wheal Sophia (silver-lead), Lezant	7	7	
1024	Wheal Speedwell (copper and tin)	2	2	
1024	Wheal Squire (copper), St. Erth	1½	1½	
256	Wheal St. Agnes (tin)	½	1	
1024	Wheal Stanagwyn (copper), St. Stephen's	1	1 1½	7½ 10
1000	Wheal Susan, Breage and Crowan	1½	2	
1024	Wheal Sydney, Plympton	1½	4	4
2000	Wheal Tom (tin & copper), Stoke Clims.	5	11½ 11¾	11¾ 12
512	Wheal Trefusis (copper), Gwennap	8½	14½	
1024	Wheal Trelusback (copper), Stythians	5	5	
256	Wheal Tremaine (copper), St. Ervan	11	1 1½	
3300	Wheal Trescoll (tin), Lanivet, Bodmin	3	1½	
4224	Wheal Trewane (silver-lead), St. Kew	1½	2¾	
267	Wheal Tryphena (tin and copper)	40	18½	
126	Wheal Union (copper), Redruth	40	40	
1024	Wheal Uny (tin and copper)	2	5 5½	
1024	Wheal Venton (silver-lead), Liskeard	4½	7½	
1000	Wheal Vincent (tin), Alternum	7½	6½	7½
512	Wheal Violet (tin and cop.), St. Stephens	1½	2	3 5
256	Wheal Vlow	2	10	4

FOREIGN MINES.

Shares.		Paid.	Present Price.
12000	Annotto Bay Mining Association (copper), Jamaica	1	6 5½ 6
19000	Australian (copper), South Australia	5	1½ 1½
3250	Kinzigthal Mining Association (silver), Germany	2½	
12000	Liguanea and General Mining Company of Jamaica	1	3 2½
5000	Linares (lead), Spain	3	2½ 2¾
500	Ditto Preference	3	3 3½
4500	Ditto Additional	1	1½
20000	Mexican and South American (copper), Mexico	4½	4½ 4½
5000	National Brazilian (gold), Brazil	30	2½ 2½ 2½
10400o	North British Australasian (copper), S. A. & New Zea.	1	½
10000	Worthing (copper), Adelaide, South Australia	3	4

COLLIERS' STRIKE IN NORTH STAFFORDSHIRE.—A partial strike of the colliers employed upon the property of Earl Granville has taken place, in consequence of a disagreement between the "butty" colliers, or overmen, and the miners, as to the rate of wages. The collieries where this has occurred are known as the Bells Mill Collieries, and are close to the township of Shelton, in which most of the miners live. They employ about 250 miners, the whole of whom have turned out, and the works are now standing. Mr. Lancaster, the agent to the noble earl, proposed, it is said, to reduce the wages about 6d. a man per day, and to introduce some fresh regulations in the colliery, which the miners conceived to be oppressive, and hence the present contest. The colliers have had some hand-bills printed, stating their case, and appealing to masters and workmen at other collieries for support, and some of their number have addressed a letter to Earl Granville. An open-air meeting is to be held at the Hall-fields Colliery on Monday. It will be remembered that the Staffordshire riots in 1842, when so much property was destroyed, began with a collier strike, but on this occasion the men seem very peaceably disposed, and no danger is apprehended; unless, indeed, strangers should be brought in to work the pits, when, probably, there would be a disturbance. That, however, is not likely, and the men say they "fear none o' that'n."

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Buddle's West Hartley 13—Burnhope Gas 11 6—Carr's Hartley 13—Chester Main 12 6—Howard's West Hartley Netherton 13—Longridge's West Hartley 13—North Percy Hartley 12 6—Redheugh Main 11—Tanfield Moor 12 6—West Wylam 12 9—Wall's-End Acorn Close 12 6—Elm Park 12 3—Hebburn 12 3—Walker 12 3—Eden Main 13 3—Lambton Primrose 13—Hetton 14 3—Haswell 14 6—Lambton 14—Lumley 12 9—Russell's Hetton 14—Scarborough 12 9—Heugh Hall 13 3—South Kelloe 13 3—Thornley 13—West Hartlepool 13 3—Whitworth 12—Adelaide Tees 13 3—Seymour Tees 13—Tees 14 3—Hartley 13.—Ships at market, 119; sold, 55.

WEDNESDAY.—Buddle's West Hartley 13—Carr's Hartley 13—Holywell 13 6—Howard's West Hartley Netherton 13—North Percy Hartley 12 6—New Tanfield 12 6—Redheugh Main 11—South Peareth 11—Tanfield Moor 12 6—West Hartley 13 6—West Wylam 12 9—Wylam 13—Wall's-End Acorn Close 12 6—Elm Park 12 3—Gosforth 12 9—Walker 12 3—Eden Main 13 3—Belmont 13—Braddyll 13 9—Hetton 14—Haswell 14 3—Lambton 13 9—North Hetton Lyons 13 3—Pensher 12 9—Russell's Hetton 13 6—Richmond 13—Scarborough 12 9—Stewart's 14 3—Heugh Hall 13 3—Kelloe 13 6—South Kelloe 13 3—Thornley 13—Whitworth 12—Adelaide Tees 13 3—Seymour Tees 12 9—West Cornforth 12 6—Hartley 13—Sydney's Hartley 13 6.—Ships, 160; sold, 94.

FRIDAY.—Buddle's West Hartley 13 6—Carr's Hartley 13 6—Holywell 13 6—Howard's West Hartley Netherton 13 6—Redheugh Main 11—Tanfield Moor 12 6—West Hartley 13 6—West Wylam 13—Wylam 13—Wall's-End Acorn Close 12 3—Harton 13—Walker 12—Eden Main 13 3—Lambton Primrose 13 3—Braddyll 13 9—Hetton 14 3—Lambton 14—Lumley 12 9—Pensher 12 9—Russell's Hetton 14—Scarborough 12 9—Stewart's 14 3—Hartlepool 14 3—Heugh Hall 13 3—Kelloe 13 6—South Hartlepool 13 6—Thornley 13—Whitworth 12 3—Seymour Tees 13—South Durham 13—Derwentwater Hartley 13 6—Sydney's Hartley 13 6.—Ships at market, 91; sold, 45.

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